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CLASSROOM MANAGEMENT

ITS PRINCIPLES AND TECHNIQUE

BY

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PREFACE

THIS book is intended primarily for students of education in universities, training schools, and normal schools, who are preparing for classroom teaching, especially in the elementary grades. It aims, first, to furnish the prospective teacher with a compendium of precepts that will aid him in the mastery of technique; secondly, to interpret these precepts in the light of accepted psychological principles; and, thirdly, to unite both precepts and principles into a coherent and fairly comprehensive system.

The data have been gathered from four sources: first and chiefly from observing the work of efficient and successful classroom teachers; secondly, from text-books and treatises upon the subject of school management and classroom practice, numerous references to which will be found in the footnotes and at the close of the chapters; thirdly, from the writer's own experience; and fourthly, from general psychological principles. Data of the last-named class have, in every case, been subjected to actual test before being included in this volume. The writer is convinced that a successful *science* of education can never be produced by working backward from highly wrought theory to concrete practice. This procedure is a

survival of the deductive habit of mind which science has long since discarded as totally inadequate to the discovery of truth. Valid principles of teaching can be derived only from observation and induction based upon successful school practice. The expert teacher learns through a selective process of trial and error how most effectively to deal with the pupils under his care. If a given educational practice is effective, there must be back of it somewhere a valid principle. It has been the writer's attempt, first to find the successful practice, and then to discover the principle that governs it. Of the difficulties to be encountered in this method of procedure, the writer is fully cognizant; of the dangers, he is not unaware. A given practice may be effective in one school and ineffective in another. Many of the precepts here presented will not be applicable to all schools, but the writer is convinced that practically all are applicable to the typical American classroom. It is the teacher who has charge of such a classroom that the book is primarily intended to aid; not that it will make the work of this teacher expert from the outset; no book could accomplish that end; but it may serve to shorten the period of necessarily amateurish practice, — to eliminate some of the early errors, and to augment, both in quality and in quantity, the successful efforts.

The manuscript has been read by Professor Amos W. Farnham, of the Oswego State Normal School, to whom the writer is heavily indebted for many valuable suggestions. Acknowledgment must also be made of the

aid and inspiration gained from the writer's association with the schoolmen of St. Louis during his service as a grammar school principal in that city, and especially from the fortnightly sessions of the St. Louis Schoolmasters' Club. To State Superintendent W. E. Harmon, of Helena, Montana, he likewise owes a debt of gratitude for a fresh and stimulating example of the attitude that one may take toward the detailed and seemingly trivial problems of schoolcraft.

For especial courtesies in the furnishing of data and illustrative material, acknowledgment is due to Assistant Superintendent C. C. Rathmann, of St. Louis; Superintendent C. L. Robbins, of the Montana State Normal College; Superintendent John Kennedy, of Batavia, N.Y.; and to Miss C. V. Sinnamon, Miss L. L. Loveridge, Miss Katherine Hayes, and Miss Jennie McGrath, of the Oswego State Normal School.

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CLASSROOM MANAGEMENT: ITS PRINCIPLES AND TECHNIQUE

INTRODUCTION

The Problem of Classroom Management

1. An extensive diffusion of education among the people is made possible by dealing with children, not individually, but in masses. Provided that they are approximately equal in age, ability, and degree of attainment, thirty pupils can be simultaneously trained and instructed by one teacher. This working unit of the educational system is termed a "class," a "grade," or a "room." The last term is perhaps the most convenient as a technical designation, for, in practice, the working unit, assembled under the supervision of one teacher, is frequently made up of two or more distinct classes or grades. Whether it is wise ever to divide a "room" into separate classes is a disputed point in educational policy, but the condition is well-nigh universal in American schools, and may be considered as representing the normal type of classroom organization.

The relative merits of the class and individual systems of instruction will be discussed in greater detail in a later section.[1] It should be said at this point, however, that the class system

[1] See below, ch. xiv.

has certain advantages to recommend it in addition to the fact that it permits a large number of pupils to be instructed by a single teacher. While pupils have doubtless been gathered together in this way since the earliest days of formal education "simultaneous" instruction may be dated from 1680, when it was first introduced into the Christian Brothers' schools by Father La Salle of Rheims, the founder of this Society. The practice extended gradually to other schools, until to-day it is the usual method of school organization in all civilized countries.[1]

2. The problem of classroom management has to do with the effective treatment of this "room" or unit-group of pupils. Primarily it is a problem of economy: it seeks to determine in what manner the working unit of the school plant may be made to return the largest dividend upon the material investment of time, energy, and money. From this point of view, classroom management may be looked upon as a "business" problem. The handling of children *in masses* is its central point of interest. How to secure the best results from an educative process carried on under this condition is the question for which it seeks an answer.

3. In a complex process, like education, it is always necessary to keep a clear perspective. One is apt to con-

[1] Cf. J. Landon, *School Management*, Boston, 1884, p. 151: "The system was early employed in Austria, and soon became general in Holland and Germany. It was adopted here and there in France from its first introduction. After 1840 it began to extend rapidly, and it is now in use in the majority of French schools. . . . As might be expected, the various schemes of simultaneous organization all resemble each other in general features, though each local variety has its peculiarities."

fuse means and ends: the means are concrete and tangible, the ends are often abstract and ideal. Thus the teacher accepts the dictum that silence, good order, "discipline," punctuality, etc., are self-justified — that these things are, in themselves, real ends of "school keeping." This error of perspective may not work injurious results under normal conditions. The true ends of good order, discipline, etc., may be gained, although the teacher may be quite unaware of what these ends really are. But lack of perspective may easily cause some serious misplacements of emphasis, if not more disastrous consequences, under exceptional conditions. The waves of fads and reforms that sweep through the educational system at periodic intervals will have but little detrimental influence upon the teacher whose theoretical foundations are firm and stable; but the teacher who lacks secure moorings is tossed from wave to counter wave, until he either loses his bearings entirely or collapses from *mal de mer*. One who maintains good order and discipline for no other reason than that one has been told that it is "the thing to do" is often the first to fall under the spell of the faddist who proclaims that disciplinary processes unduly repress the child; deprive him of the spontaneity and freedom that are his dearest birthrights; and are, in general, to be looked upon as relics of barbarism.

It is for this reason that an adequate foundation in educational psychology and in the general theory of education is so essential to every teacher; and it is for this reason that every effort should be made to discover the fundamental laws that

underlie the educative process and so to make possible an educational psychology upon which there shall be universal agreement. The classroom teacher needs a sound theoretical foundation in a measure that is not even approached by the rank and file of other crafts and professions. The almost infinite possibilities of education make the influence of even the humblest subordinate a matter of tremendous import. If opportunities are neglected, if wrong principles are applied, if true principles are misinterpreted, conditions may result which are all the more disastrous because their insidious character cannot be detected perhaps until years have elapsed. Even the educational psychology that is now available is sufficient to develop in any teacher an acute sense of his responsibility if nothing more. And a sense of responsibility will do much toward preserving one's equilibrium in a whirlwind of conflicting theories and antagonistic practices.

4. The "business" concept on of the school must be viewed in this perspective of means and ends. The school resembles a factory in that its duty lies in turning a certain raw material into a certain desired product. It differs from a factory in that it deals with living and active, not with dead and inert, materials. Because of this vital factor, the material with which the school deals is influenced by *all* the forces of the environment, and not alone by those that are consciously designed to mold it to the desired form. Some of these forces — those of the home and of the street, for example — are largely beyond the pale of the school's influence. There are, however, certain activities of the school itself which exert a profound influence over the pupil's life, and yet which are not generally recognized by teachers as vital elements in

the educative process. School studies are supposed to "educate"; the personality of the teacher is recognized as an influencing factor; and the notion is slowly growing that the physical surroundings of the pupil — the buildings, the walls of the rooms, the hallways, the yards — exert a formative influence that cannot be neglected. But even those who will agree with all of this sometimes fail to appreciate the fact that, in such details as passing books and writing materials, passing to and from the blackboard, getting wraps, preserving silence and good order, an educative influence is being exerted that may equal in value the influence of lessons and recitations.

This, then, is the factor that makes school management so different from the management of other business institutions. The very *forms* that school management adopts to make the lessons and the recitations effective are, in themselves, vital factors in the educative process.

For example: Assuming that a thoroughgoing mastery of the multiplication tables is essential to the educated individual, it becomes the province of classroom management to see to it that this mastery is attained by all of the members of a given class with as little waste of time and effort as is possible. It may be proved that the fear of an examination, or of failure, or of the loss of a privilege, or of a physical punishment, will result in an intense application of the pupil to the tables, and so insure the desired mastery with a minimal expenditure of time and of the teacher's energy. If one of these incentives were found to work most economically, the problem of management in this connection would, superficially speaking, be solved.

But it will be readily seen that an incentive might be thoroughly effective in this narrow and superficial way, and yet work an irremediable injury to the pupil.

Again, an accurate mastery of the mechanics of reading may be assumed as essential to the educated individual. Classroom management must provide conditions that will insure this mastery. Perhaps nothing leads more quickly to this mastery than to have each pupil in the class watch for the mistakes that other pupils make, and point out the correct form to the one who is in error. By adopting this device, the teacher can assure himself that every pupil in the class will give the lesson his undivided attention, and that every pupil who reads will strive as strenuously as he can to avoid mistakes. The desired end is gained — but classroom management must go farther than the attainment of superficial ends, no matter how desirable these may be. It must inquire into the effect upon the pupil of the means that are employed to reach the end. It must consider the *net* results — which, in the instance cited, will probably be detrimental in that the pernicious habit or attitude which we characterize as hypercritical or pedantic is developed by the practice in question.

Another instance: Punctuality and regularity of attendance are essential if the school is to be operated with a minimum of waste. From the narrow point of view, classroom management fulfills its function in this regard when all pupils attend regularly and punctually upon all the sessions of the school. From the narrow point of view, such a result would represent the acme of efficiency for classroom management; but it is clear that the strenuous measures that would be essential to the fulfillment of such a condition would work injury and injustice out of all proportion to the value of the result obtained.

5. It may be concluded, therefore, that the measures which classroom management adopts to prevent or elimi-

nate waste must always be considered, not only with reference to the specific end sought, but also in the light of the much broader end of education in general.

Can the ultimate end of education be so definitely stated as to form an adequate guide or criterion for questions of this sort? This depends obviously upon the character of the aim that one adopts. If one has distinctly in mind certain definite and tangible qualities that must be possessed by the educated individual, one's judgment as to the influence of certain measures upon the development of such an individual will at least be better than an aimless practice that is trusted to "hit upon" the right procedure by chance or accident — and much of our educational practice, even to-day, could be subjected to this stricture.

6. *The Aim of Education.* Fundamentally, the task of the school is to fit the child for life in civilized society. The child, when he comes into the world, is not, like the young of most animals, adapted by nature to the life that he must lead. During the plastic period of immaturity he must be trained and instructed in order to enter, at maturity, upon the life that is represented by the social world into which he is born. Education is the largest name for this process, and educative forces consequently include all forces that influence the individual to this end. School education is only a specific kind of education: the education represented by the home, the church, or any other social institution is equally justified in assuming the same name.

In general, the aim of the school may be formulated

as *social efficiency*.[1] Whatever the school undertakes to accomplish must be judged in the light of this standard. Not only must the materials of instruction be subjected to this test, but the methods of instruction must not exert an unsocial influence; and, what is especially important in the present connection, the schemes and devices of classroom management must meet satisfactorily the same requirements. The test of the ultimate aim must be applied at every point; otherwise the work of the school will lack system and harmony, and adequate results will be secured only through the operation of the law of chance.

7. It is not to be assumed, of course, that a rigid application of this test is possible in the present state of our knowledge. (*a*) Not all authorities are agreed upon the essential characteristics of the socially efficient individual. Nevertheless there is sufficient agreement for practical purposes. Every one knows that such qualities as honesty, self-control, willingness to coöperate, a certain measure of amiability, and a certain measure of altruism or social spirit, are essential to one who is to live and deal with one's fellows; and every one knows that the antitheses of these qualities tend to render one socially inefficient. There can be no disagreement upon points so manifest as these. (*b*) Again, it is often impossible to state with certainty whether a certain method or a certain device

[1] See the theoretical discussion of this aim in the writer's *Educative Process*, New York, 1905, ch. iii; cf., also, M. V. O'Shea: *Education as Adjustment*, New York, 1903, chs. vi, vii.

will operate favorably or unfavorably with regard to these or other desired qualities. The actual results of the teacher's labor cannot be accurately determined until years after the work has been done ; by that time, it may be, the methods have been forgotten and the teacher himself perhaps has gone to his reward. But, while this assertion is not to be doubted, it is none the less true that sober reflection and a careful weighing of probabilities will enable one to judge with some degree of accuracy; and anything that approaches rigidity and exactness, even remotely, is vastly to be preferred over the "hit-or-miss" manner of dealing with troublesome questions that has so long made education a butt of ridicule for members of other crafts and professions.

We are speaking here of the influence upon social qualities of the methods and devices of instruction and management. The same question may be asked concerning subject-matter of instruction. The whole problem is, beyond doubt, one of the most intricate and involved that science has ever attempted to solve. If a test for intellectual growth were sufficient, the task would be difficult enough; but intellectual growth and development is so inextricably bound up and wound about with emotional factors practically defying analysis or reduction to quantitative and numerical terms, that a complete and satisfactory solution would seem to be far in the future. Nevertheless, the difficulty of a problem is not a plausible excuse for neglecting it. Here, as elsewhere through the realm of scientific investigation, patience and perseverance cannot fail gradually to overcome what seem at the outset to be insuperable obstacles; and here, as elsewhere, the grave danger lies in assuming a problem to be insoluble and in set-

tling back into the easy, complacent attitude of blind and empirical practice.

8. Specifically, the question that classroom management must ask of every device or method that is proposed for the elimination or prevention of waste in the work of the school is this: Will the method or device be consistent in its operation with the ultimate end of education; namely, the social efficiency of the individual who is being educated? To consider a concrete case: The "prize" system encourages intense application on the part of pupils. It makes possible concentrated and sustained effort with a minimum of supervision. So far it tends to subserve the economy of the educative process. But what will be its ultimate effect upon the *social* qualities of the pupil? Does it make him selfish, self-centered, and self-seeking? Does it tend to develop in him non-social or anti-social ideals? These are questions that must be asked and for which an answer must be sought through careful reflection and investigation. *It is not sufficient in such cases to "jump at conclusions" or to draw one's conclusions from prejudice and dogma.* Evidence must be sought and sifted, and generalizations based upon this evidence must be understood as having validity only in proportion to the number and authenticity of the facts upon which they are based.

But this does not mean that action is to be delayed until scientific investigation has revealed absolute truth: it simply means that the reflection which precedes action should be of the rational, and not of the emotional, order;

that all available facts should be considered; and that the question should be viewed from every possible point of view and with reference to every probable outcome.

9. *Plan of Treatment.* The problem for which a solution is sought in the following pages is how most effectively and economically to subject a group of individuals to the educative process. Two general sources of waste are involved in the "simultaneous" system of education: (1) Waste may be induced by the mechanical difficulties that arise in the mere fact of numbers; progress may be delayed because the group is "unwieldy." Confusion and disorder, irregular attendance, lack of system, and unhygienic conditions in the schoolroom are all specific factors which demand consideration from this point of view. Inasmuch as this source of waste can be largely eliminated by building up a number of specific habits in the various individuals of the group, and by organizing a system that will take care of the mechanical details, these factors may conveniently be treated together under the designation, "Routine Factors of Classroom Management." (2) A second general source of waste, however, inheres in the very system thus produced. The "machine" tends to absorb the individual, and the progress of the class is measured by the progress of its slowest member. The problems of inattention, "scamped" work, "backward" pupils, and the varying needs of individuals must be considered from this point of view. While the routine factors will soon come to take care of themselves, this second class of factors must always receive the explicit attention

of the teacher. In view of this fact, they may be grouped together and conveniently designated as the "Judgment Factors of Classroom Management."

REFERENCES. — J. Landon: *School Management*, Boston, 1884, pp. 150–153; J. Baldwin: *Art of School Management*, New York, 1887, pp. 15–17; R. N. Roark: *Economy in Education*, New York, 1905, pp. 7–10; A. Tompkins: *Philosophy of School Management*, Boston, 1898, pp. ix–xiv; E. E. White: *School Management*, New York, 1893, pp. 9–16.

Faye K

PART I

THE ROUTINE FACTORS OF CLASSROOM MANAGEMENT

CHAPTER I

Routine and Habit

1. System and organization are the universal solvents of the problem of waste. This is as true of social life as it is of animal and vegetable functions; it is as true of the spiritual and ideal phases of social life — religion and education — as it is of the material phases of social life, — "business" and government. Sometimes, it is true, system and organization defeat their own purpose; they become ends in themselves, and thus tend to obscure the true ends for which they were established. When the true perspective of means to ends is lost to view, the means naturally become magnified in importance, and the result is "red tape" with all of its attendant evils. This degeneration is the line of least resistance; the unfortunate fact is that the responsibility for the evil results is apt to be placed upon system in general, rather than upon perverted system where it properly belongs.

In education, the evils of perverted system are the chief cause of the violent reactions which periodically affect the

school system. Such reactions are often initiated by men of wide experience and high standing in the educational world. These reformers would cut the red tape of school organization; discard, once and for all, the repressive forces that confine and limit the child's activities; and leave teacher and pupil to work out each his own salvation in the chaos of confusion and disorder. These frequent and extreme reactions are often beneficial in that they call attention to useless and wasteful routine, and thus serve to stimulate a healthful reform. The young teacher, however, should view them with distrust, for the natural tendencies of the young teacher are normally all in their favor. Youth is instinctively radical; it resents the iron rule of established custom. Age is naturally conservative; the form has been before its eyes so long and so constantly that it accepts it as equivalent to the substance. The path of progress lies in the middle ground. But to discard system and organization entirely is to repudiate the basic law of all advancement; evolution is simply a progressive development toward forms that are more and more elaborately organized, and in which system and coherence take the place of chaos and incoherence.

2. In the life of the individual, system and organization are represented, first by instinct, and secondly by habit. Instincts are the organized reactions that are inherited from past generations — complex systems of reflex mechanical movements that have been built up through natural selection in the course of thousands of generations. The lives of most of the lower animals are governed entirely

by instinct, leaving very little latitude for individual development.

Habits, on the other hand, are organized reactions built up in the course of the individual's lifetime. They are formed through the operation of consciousness in governing the adjustment of the muscles to suit any particular environment. Animals that can form habits are, therefore, much more plastic, much more adaptable, much less at the mercy of circumstances, than are animals which depend entirely upon instinct. Thus mind or consciousness is the characteristic of the higher forms of animal life. It changes, modifies, reconstructs, instinctive adjustments, and then fixes the new forms as habits, thus permitting their operation independently of conscious control. Mind might be said to stand midway between instinct and habit; it is the factor that changes the rigid adjustments of the lower forms into the plastic adjustments of the higher forms.

In the last chapter, it was stated that education aims to reconstruct the child's adjustments in such a way that he will be fitted for the social life. That is, social life — civilized life — is an artificial thing. It is developing every hour farther and farther away from the plane of "natural" or instinctive life. As each generation is born into the world, its members must be taken and readjusted — transformed to meet the conditions to which their instinctive reactions are inadequate. This is done largely by building up new systems of habits.

3. *The law of habit-building* becomes, therefore, one

of the basic laws of education. In brief form, this law may be stated as follows: *Focalization of consciousness upon the process to be automatized, plus attentive repetition of this process, permitting no exceptions until automatism results.* The fundamental significance of this law cannot be overestimated. If there is one psychological principle that may be looked upon as a universal solvent for educational problems, it is this. If carried out to the letter, its operation is as certain and relentless as that of the law of gravitation.

Objections have been urged against this formulation of the law of habit-building on the ground that habits are frequently formed without *attentive* repetition. The mere fact of repetition is held to be sufficient for the formation of a true habit and even initial focalization is, by some, held to be unnecessary. The grounds upon which this position is taken are, on the surface, quite convincing. It is well known that one may lapse into bad habits without effort. For example, it is not a difficult matter for one to acquire the habit of rising at eight in the morning instead of at six. The habit of giving way to anger instead of inhibiting its expressions can be acquired easily enough, and so on through a long list of undesirable reactions. The discrepancy between these facts and the fundamental law as stated above is not, however, difficult to clear away. *Habits which follow the lines of instinctive tendencies* will, of course, be built up without effort. Such "habits" are, in truth, nothing but instincts; the old "pathways of discharge," which have been closed up through drill and discipline, may be reopened with a minimum of difficulty. The path of least resistance is always downward — is always toward the instinctive and brutal, and away from the civilized and

human. The law of habit-building holds only when habits are being formed in opposition to instinctive tendencies; but it is hardly necessary to point out that the great civilizing habits which it is the duty of education to develop belong to this class.

4. Routine or customary action in a group is not only analogous to habitual action in the individual, but the former is based upon the latter. That is, the "like-response" [1] of a number of individuals to the same stimulus demands, if such response is to become a matter of custom, the building up of like habits in the individual members of the group. The law of habit-building lies therefore at the basis of group routine.

In its application to classroom management, this principle means that whatever is to become a matter of invariable custom in the classroom must be made conscious to the pupils at the outset (that is, focalized), then drilled upon, consciously and explicitly (attentive repetition), and held to rigidly, until all impulse, tendency, or temptation to act in any other way has been entirely overcome.

Thus, in the passing of lines, the teacher will give minute directions on the very earliest occasion — before bad or inadequate habits have been formed. During several days these directions will be brought to the pupils' attention (refocalized) just before the lines pass. Perhaps several drills will be given at times other than those at which the lines regularly pass, in order that a more distinct impression may be made. Absolutely no exceptions will be tolerated until the routine has

[1] Cf. F. H. Giddings: *Descriptive and Historical Sociology*, New York, 1906, p. 182.

become rigidly fixed — after which time, of course, exceptions will not, in the nature of things, be apt to occur.

5. Most of the difficulties of school-keeping owe their existence to the fact that this fundamental law is so easily neglected in practice. One begins a process with every intent to persevere, but the desire for change and variety, the instinctive dislike for continuous effort, frequently prevents attentive repetition in sufficient amount to insure the functioning of the process as habit. Unless the process reaches the stage of automatism, all of the initial repetitions represent time and energy practically thrown away. That is, if one starts out valiantly to establish a habit, carrying on the repetitions for some time, but becoming discouraged before automatism is reached, practically all of the effort that has been given to the preliminary stages is absolutely wasted. The stages preceding the final repetition which induces automatism are necessary, it is true, but, taken alone, they are quite without value.

In school work, a vast amount of time is wasted by leaving processes at the "halfway house" between focalization and automatism. This is true both in the work of instruction (the mechanics of reading and spelling, the automatization of the addition and multiplication tables, etc.) and in details of school management. The pressing need, especially in the elementary school, is for strong teachers who can rigidly "hew to the line" in all of these initial stages of habit-building. Even scholarship could be sacrificed, if necessary, in attaining this end. The

demand is for firmness and tenacity of purpose on the part of the teacher; not firmness and tenacity for their own sakes — this makes the martinet; but rather a tenacity, a steadfastness, that comes from a clear perception of ends. Perhaps the best teacher, from this point of view, is one whose natural tendencies are all in the direction of leniency, but who, recognizing the importance of the end to be gained, uses this leniency only to check and temper the measures that might otherwise, through their severity, defeat their own purposes.

It is the writer's observation that the rather rare individual known as the "born" teacher belongs to this class. Innate sympathy for childhood is demanded of the teacher who has to deal with little children, but this sympathy must not be of the weak-kneed or sentimental variety. Long before they reach school age, children become keen in their estimates of those who have them in charge. The parent or nurse who can be deceived or imposed upon is quickly and surely recognized, and probably ninety per cent of these owe their weakness to lack of persistence. Disciplinary measures are undertaken spasmodically; exceptions are permitted in the operation of the necessary rules; and the result is that adequate habits are never formed. The situation is precisely the same with the weak teacher. His sympathy for childhood may be exceptionally acute, but this will not serve to build up effective habits if persistence is lacking.

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CHAPTER II

Initiating Routine: Preventing Waste by Starting Aright

1. In classroom management, as in other forms of activity, efficiency of effort depends in no small measure upon the way in which one starts. Psychology teaches that "primacy" is a powerful factor in the recall of experiences; first impressions lend the dominant tone to succeeding impressions. The disastrous effects of a bad beginning multiply disproportionately the chances of failure. In the career of the teacher nothing is more important than to make a "good start." It establishes a certain measure of prestige in the minds of parents and school officers; it has important bearings upon one's standing with one's principal and superintendent; but most of all it "counts" with one's pupils.

It is true that the evil influences of a bad beginning may sometimes be overcome by strenuous effort, and it is equally true that the lessons of experience gained in this way may mean much for the growth of the teacher. One may admit all this and yet conclude that, if mistakes can be avoided by a careful adherence to principles derived from the experience of others, a great gain may be made. In the work of teaching, novices often fail to profit by others' experience, not because they think themselves above learning in this way (although it must be

confessed that this attitude is sometimes met with), but simply because they do not appreciate the significance of the cautions and precepts proposed for their guidance; without the experience, they lack an "apperceptive basis." This can be supplied only in part by concrete cases illustrative of the way in which other teachers have solved certain problems. Many of these problems appear very simple and trivial from the outside. "Why bother with them now?" asks the novice; "I can solve them without difficulty when they make their appearance in my school — if they ever do." This is the typical attitude of youth, and it is almost always an attitude, not of self-conceit, but of self-confidence. It would be far from the purpose of the present discussion to destroy or lessen that confidence. It is the most valuable asset that any young teacher can possess. Without it failure, or something akin to failure, is almost predestined. The purpose here is rather to fortify self-confidence by pointing out the quicksands that would swallow it up; and the chief of these is a bad beginning.

2. *Preparing for the First Day of School.* The "first day" of school becomes, therefore, a most critical point in the teacher's career, but it is rather comforting to know that its critical significance is somewhat counterbalanced by the comparative ease with which its problems may be solved. As far as the pupils are concerned, every condition favors the teacher; to them the situation is novel, and the "new" always demands attention. Thus far the problem solves itself.

With the conditions so favorable for attention and good order, preparation for the first day's work should be directed toward a speedy settling of the pupils into the regular channels of the term's work. It is generally agreed

among schoolmen that, the sooner the regular routine is established, the better will be the results. The custom of letting the pupils simply assemble for classification and the assignment of seats and then dismissing them for the remainder of the day, is to be looked upon as bad practice from the standpoint of school economy. It simply means that the second day must be given over to more beginning work, and very frequently the first week passes with absolutely nothing accomplished. If the first week goes off in this slipshod manner, the second is likely to follow upon its heels with the same characteristics, and by the end of the third week, pernicious and time-wasting habits will have been initiated. The only way absolutely to insure a school against such waste is to make the very first day thoroughly rigorous in all its details. Some time, it is true, must be devoted to focalizing and drilling upon matters of routine, but some time will also be given to strenuous instruction and equally strenuous acquisition along the lines of the regular work.

3. The teacher, therefore, has many things to think about and plan for before he goes to school on the morning of the opening day. The more important of these may be listed under the following precepts and directions:—

Preliminary Arrangements. (1) Visit the school some time before the opening day. Become familiar with the arrangement of the building and of the room that you are to occupy. Note carefully the entrances and exits. Note the location of the wardrobe. Determine the best method of passing lines.

Work out the routine of collecting and distributing wraps. Note location of toilet rooms and closets. Note method of heating and ventilation, and plan how ventilation may be provided for without causing serious draughts.

(2) Have upon your desk enough paper to supply material for the first day's work for all pupils in case some should come without the necessary materials. Also have enough pencils, already sharpened, to supply each member of the class. Often boxes of pencils will be found in the schoolroom, even when the supplies are not furnished free to the pupils. In case, however, no pencils are found, it will be economy for the teacher to purchase a supply from his own purse. With paper and pencils, a day's work can be carried through, even if text-books are not available.

(3) Make certain that the blackboards are clean and fit for use. Plan a definite method of having classes pass to the blackboard. Be sure that chalk and erasers are provided.

(4) Look through the teacher's desk for the last term's register. In it you will doubtless find a list of the pupils promoted and a list of those remaining in your room. If your predecessor has been thoughtful, you may also find a statement of the work done during the previous term. This will show you where to begin with at least one of your classes.

(5) Secure a course of study. If the school has no regularly adopted course, use the state course. In any case, the work should check with the state course, where the latter is mandatory. Procure the adopted text-books, and plan to start your pupils at the point[1] indicated for the grade and class in the course of study, unless the record of the previous teacher indicates definitely the point that the classes have already reached. Every teacher should be careful to leave in his desk at the close of each term a statement of the work done by his various

[1] In such subjects as arithmetic and grammar, the first lessons should generally be given over to reviews of the previous term's work.

classes. This will frequently save the next teacher a great deal of trouble and useless work.

(6) Plan the first day's work for each class, aiming to cover in every subject some work with which the pupils may be assumed to be familiar. Plan especially careful assignments that will provide definite work for study periods in case pupils come (as many will) unprovided with text-books. If the text-books are furnished free, and if a supply will be available for the opening day, the work may, of course, be so arranged as to utilize the texts from the outset. This will materially simplify the first day's problems, but, unhappily, it is a condition not frequently fulfilled. For classes up to the fifth grade, reading lessons may, if necessary, be placed upon the blackboard. Picture study is available in geography and in language work where texts are unavailable. Map study from a wall map, and map drawing from a blackboard model, are suggestive for the work in geography. In every case, care should be taken to plan for real, effective teaching, and not merely for "busy work." Seriousness of purpose must be the dominant note throughout.

(7) Construct a tentative program based upon the course of study. Make this as nearly perfect as possible from the theoretical standpoint (see principles of program construction, Chapter IV), so that subsequent changes will be limited to those details that are demanded by unforeseen contingencies.

(8) If the school is graded, try to arrange for preliminary consultations both with the principal and with the teacher of the preceding grade. If the principal does not suggest this, the teacher should. Note very carefully any suggestions that the principal may make and follow them implicitly. In a rural school, consult with the county superintendent, personally if possible, if not personally, at least by correspondence. Ask *definite* questions in all cases where you are in doubt concerning the course of study, the policy on disputed methods of instruction or management, the text-books to be used, etc.

4. *The First Day's Work.* These preliminary matters well in hand, the teacher is ready for the first day's work. The following suggestions cover some of the points to be borne in mind: —

(1) Be on hand early.

(2) See that the classroom is in good condition: floors clean, desks dusted, wardrobes ready for use. Do not complain to principal or janitor unless conditions are intolerable. Remedy matters yourself.

(3) See that chalk and erasers are distributed at the blackboard, or in readiness for distribution by monitors to be appointed. In any case, be sure that these necessary materials are on hand and in condition to be used, — chalk boxes open, erasers cleaned, etc.

(4) Place upon the blackboard whatever work you have provided for your earliest classes. Your program will doubtless indicate arithmetic as one of the earliest forms of seat work. Have examples upon the blackboard in sufficient number to provide work in arithmetic for all classes.

(5) Pupils who arrive early should be greeted pleasantly and directed to take seats. Many successful teachers require pupils arriving before the "first bell" to observe the same decorum that they would observe during the regular session, so long as they remain in the schoolroom rather than upon the playground. Whether you adopt this policy or not, it is well on the first morning to check any tendency to run about the room or to pass from seat to seat.

(6) It is good policy always to enlist the aid of the pupils in helping you about the routine preparatory to the real school work. On the first morning, they may, at your direction, distribute the chalk and erasers, slips of paper for the names of the pupils, the pencils, etc.

(7) Everything should be in readiness when the bell rings and the lines come in. The teacher should direct the pupils to take seats regularly in the different rows in the order of their entering the room. After this first preliminary seating, changes may be immediately made if desired. If there are two classes, and if one has already been in the room, — as will be the case wherever the promotions are semi-annual, — let the older pupils take the seats occupied the preceding term. If all or most of the pupils are new, let them take seats as suggested as speedily as possible, making temporary changes where necessary to accommodate pupils to different sizes of seats and desks. This should occupy but a very brief period.

(8) Place into immediate application your prearranged plan for disposing of the hats and wraps. If they are to be collected, appoint the first or the last pupil in each row as a monitor for this purpose. Give clear, distinct directions, and enforce these directions rigidly from the outset. If the wraps are to be left in the wardrobe as the pupils pass in, have the lines file out and return to the room according to your plan, depositing their wraps as they pass. The manner in which you handle this, the very first bit of routine, will have a large share in determining the first impression that you leave with your pupils.

(9) When this has been accomplished, the time is opportune for your opening remarks, if you wish to make any. Let these be brief, clear-cut, and devoid of threats, cant, or platitudes. Especially guard against "soft soapiness." A song is also in place if you can select one which is familiar to all the pupils, and lead it well yourself. Devotional exercises are in place unless prohibited by law, ruling, or public sentiment.

(10) After these preliminaries direct each pupil to write his name upon the slip of paper handed to him. Have the first pupil in each row collect the slips, placing his own at the bottom of the bundle, and the others in order. As the slips of each

row are brought to you, place a rubber-band about them, and then arrange the bundles across your desk in the order of the rows. You will then be able, with a minimum of trouble, to find the name of any pupil by reference to the slips belonging to his row.

(11) All this should occupy but a brief period of time — certainly not more than twenty minutes — and from this time on, in a two-class or three-class room, the regular program should be adhered to. Assign work to the more advanced class, if there are two, or to all but the lowest class, if there are more than two. The first recitation should begin with this. If the pupils are to come forward to occupy a recitation bench, give explicit directions for the passing of the lines, and explain the signals that you propose to use. It will probably be necessary to give two or three drills upon this before the movement to the bench and back to the seats satisfies you. The first day's work may very well be devoted in part to such drills, but always save time for some serious work. If the class passes to the blackboard, drill it several times in the prearranged movement of lines.

(12) In an ungraded or rural school, the work cannot be begun so expeditiously on account of the time necessarily taken up in finding out what pupils belong in the several classes. In such a case, start this work of classification immediately after the slips have been collected. Let the older pupils group themselves tentatively and then set the different groups at some form of seat work. The younger pupils can then be examined more carefully and classified. This is a difficult matter to handle successfully at the outset, and changes will probably be found necessary in several instances. Up to the fifth grade, classification should be based mainly upon the pupils' stage of advancement in reading. From the fifth grade on, arithmetic is the most convenient subject to use as a test.

(13) Stop all work a few minutes before recess time to drill

pupils upon the passing of lines. In a large graded school it will be necessary to know how all the lines pass to the playground in order that you may assemble your pupils in the proper place. This should be one of the matters learned beforehand by consultation with the principal or with other teachers.

(14) Appoint monitors to distribute pens, tablets, copy-books, etc., just prior to the first periods when these materials are used. Distribute the monitorial functions among as many pupils as possible, holding each strictly responsible from the first for the efficiency of his service. Devote some time during the first day to drilling the monitors in these duties. Let them pass and collect the materials again and again, until they can do the work with celerity, dispatch, and good order. If you propose to use this monitorial service as a reward of good standing (see discussion, Chapter III), let the pupils know this at the start, stating that changes will be made at the beginning of the second week or month, as the case may be.

5. The teacher will find plenty to do during whatever time may be at his disposal the first recess and noon intermission. In the first place, work for the classes that come after the intermission must be placed upon the boards. Probably some time can be devoted to examining the work that the pupils have done in their early exercises. In this way some notion may be gained of the previous work and present attainments of the pupils, and a gauge secured for measuring their application. Doubtless it will be found that some of the pupils are not "up to grade," while a few may have been placed in classes below their standard of attainments. Notes should be taken of all such cases, and the pupils that are very obviously misplaced should be readjusted without delay — after con-

sultation, of course, with the principal. Care should also be taken to furnish whatever reports the principal or superintendent may desire at the close of the first session.

Just prior to the close of the first session, time should be taken to instruct the pupils in packing away books, arranging desks in a uniform and orderly manner, etc. If pencils, tablets, etc., are to be collected, the monitors should be drilled in this duty.

6. In an ungraded school the conditions are, of course, much more involved and complicated than in a graded school. The amount of preliminary work is much greater, and the chances for a smooth running of the first session are much smaller. The general procedure, however, is the same in both cases: minute prearrangements that shall look out for all mechanical details; extremely careful preparation of first lessons; strenuous drills in class movements, lines, passing to blackboards, monitorial functions, etc.

The first day should leave with the pupils a distinct impression that work has begun in earnest, that no time has been "frittered away," and that something definite has been accomplished.

REFERENCES. — For valuable directions regarding the classification of pupils, especially in ungraded schools, see J. Baldwin: *Art of School Management*, pt. ii, ch. iii; for exceptionally good advice on the work of the first day, see a copyrighted article by F. A. Wagner: "A Special Method of Class Management," in *Western Journal of Education* (San Francisco), 1905, vol. x, pp. 15 ff.; also, Roark: *Economy in Education*, pp. 37–40; L. Seeley: *A New School Management*, New York, 1903, chs. iii, iv.

CHAPTER III

Mechanizing Routine

1. In discussing the problems of the opening day of school it was implied that the routine activities of the classroom are to be reduced as rapidly as possible to the plane of unvarying habit, and the fundamental thesis of that discussion was the first article in the law of habit-building: initial focalization of attention upon the activity to be mechanized. It is now necessary to justify the position implied, and, in doing this, it will be necessary to treat these details of routine on a broader plane than that involved in their relation to the first day's work.

2. There are at present two opposing theories of school management. The advocates of one theory protest against anything that resembles a military organization of the schools. The advocates of the other theory favor some measure of reversion to the old-time school fashion of rigid discipline and machinelike organization. The former class must not, however, be looked upon as positively approving chaos and disorder. They disapprove of good order only when it is forced from without; in other words, all government must be *self*-government. Nor do the members of the latter class indorse the sterner measures which the old-time schoolmaster employed to secure the

desired end. They do believe, however, that some form of restraint and control must be imposed from without. The chief difference between the two theories is a difference of opinion as to the capacity of the child for self-government.

There can be no doubt that most of the advanced and progressive educators of to-day are advocates of the former doctrine. Neither can it be doubted that many who hold to the "machine" doctrine are teachers of small mental caliber and indifferent training who would be completely discomfited were the acme of good teaching construed as anything more than the ability effectively to administer discipline. When originality and spontaneity of instruction and ability to secure and hold interest are demanded, many of these teachers are not equal to the task, and they consequently attempt to cover up their inefficiency by deriding the worth and utility of a task to which they are themselves incompetent. It is an old trick — as old as human nature; but this does not prevent it from making the situation rather difficult to one who recognizes some measure of justice in their attitude toward details, while at the same time recognizing the unworthy motives that animate their opposition.

3. One might infer from this discussion that the "machine" doctrine is not criticised in and for itself, but rather because it may be so easily applied by mediocre talent. This, however, is not altogether true. The adherents of the "anti-machine" doctrine offer some very cogent arguments against mechanical organization by

whomsoever it may be applied. These arguments may be briefly summarized in the following propositions: —

(1) Mechanical organization disregards the individuality of the child. All must act in concert; each must do what the others do.

(2) Mechanical organization is imposed from without. It is an expression of arbitrary and despotic rule. Pupils are required to do things for which they can see no reason. This is contrary to the fundamental principle of democratic government.

(3) Mechanical organization imposes a dead and dull background of routine which effectively discourages spontaneous effort. As a result, the brighter pupils react against it, while the duller pupils find the atmosphere perhaps somewhat congenial. This places a premium upon those who are naturally the less capable, while those naturally the more capable are branded as mischievous and "bad."

(4) Mechanical organization in matters properly routine tends to "spread" to matters of a different nature. Classes that are led to move in a lock-step physically tend soon to move in a lock-step mentally. Memoriter work of the most formal type tends to displace rational work.

(5) Habit is always the antithesis of judgment;[1] routine antagonizes reason. If machine reactions are overemphasized, intellectual reactions will be underemphasized. The tendency will always be to produce the machine, the automatism; and a machine reacts as fatally when the reaction is inadequate as it does when the reaction is adequate. The machine, in other words, lacks *initiative*, and initiative — ability to solve novel situations — is the power that is needed to meet the conditions of our complex modern life.

[1] Cf. *The Educative Process*, ch. vii.

(6) If success in mere mechanical organization is held up as the acme of effective teaching (as is often the case), teachers who are really efficient from the standpoint of instruction and inspiration will be discouraged from entering or continuing in the work of the school. This work will therefore be left to the drill-masters and gradgrinds — men and women of small caliber minds.

4. No one can justly deny the cogency and force of these arguments; in fact, they carry certain conviction if one for a moment loses the perspective that comes only from an adequate conception of fundamental principles. In what manner, then, are these arguments inconsistent with fundamental principles?

In the first place, it should be remembered that the contention is not between organization and no organization, but rather concerns the question, What constitutes an irreducible minimum of organized routine? the "anti-machine" camp insisting that it is better to run the risk of some waste through too little organization than to incur the dangers noted in the above arguments through too much organization. It therefore becomes necessary to examine these arguments to determine (1) whether they are valid, and (2) whether, having proved their validity, one can find some means of counteracting the dangers that they involve. One should at least take these steps before repudiating organization entirely.

(1) The argument that mechanical organization disregards the individuality of the pupil by imposing the same activities upon all, has little force unless it can be proved that no ade-

quate channels remain through which individuality can find expression. This is not apt to be the case, for the organization of routine provides only for the invariable school activities. Individuality and originality and initiative may still find adequate expression, and this expression (theoretically, at least) will be the more untrammeled because routine has been reduced to habit.

(2) That mechanical organization is imposed from without, and that the pupil sees no reason for its existence, would be an effective argument only if it could be proved that that organization for which the pupil sees a reason would be more effective. Probably this would be true with children in the period of adolescence or a little before adolescence, and when this age has been reached, it is doubtless well to explain the reasons for routine drills. Prior to this period, however, much time spent in explaining the "why" is time thrown away. Young children may give every indication of perceiving the reason for a certain requirement and yet find that requirement just as irksome as it would be were the rule stated dogmatically and enforced arbitrarily.

(3) That mechanical organization favors the weaker pupil at the expense of the brighter, and, through its unnatural insistence upon small and seemingly trivial matters, disgusts the latter and incites him to revolt, is an argument of somewhat greater weight. Still it must be proved that the average "rebel" in school is found among the brighter pupils, and this would be extremely hard to demonstrate; even if it were demonstrated, it would have further to be proved that compliance with disciplinary measures is not a good thing, even for a bright pupil. Society can bear up under the strain of a few geniuses who have never learned the lessons of self-control, but these few practically exhaust its patience.

(4) The statement that habit and judgment are antithetical processes is best answered by the equally true statement that

both are necessary. Here again the perspective, the balance, must be kept steadily in mind. Habit is good only in so far as it makes judgment more effective by looking after the details that are unvarying. Judgment is effective only when it can confine itself to the new and variable, confident that habit will care for the customary and invariable. Habit may interfere with initiative, but initiative without habit would be thoroughly unreliable and futile. The discrepancy is fundamental, and can be solved only by compromise.

(5) That mechanical organization keeps from the teacher's calling the men and women who can inspire as well as administer discipline and instruction, is doubtless true. The inspirational type of teacher is usually the type to whom routine and details are infinitely irksome and laborious. Yet these are the men and women that education stands in greatest need of enlisting in its work. So great is this need, in fact, that one might almost say, "Secure them at any cost; routine, discipline, organization, even instruction, may be quoted at a discount when inspiration is in the market." And yet it would seem not impossible to find inspirational power combined with a certain delight in routine; perhaps not natively, instinctively, but at any rate combined through some discipline of experience. One who studies educational theory aright can see in the mechanical routine of the classroom the educative forces that are slowly transforming the child from a little savage into a creature of law and order, fit for the life of civilized society. One who gains this conception no longer looks upon mechanical routine as something that is merely humdrum and static. To see a habit take root and grow is fully as fascinating an experience to the initiated as to see an idea or an ideal dawn upon the mind of the child. It is the latter privilege that is supposed to be the reward of the inspirational teacher — the man or woman who possesses the true "genius" for teaching. But the former privilege may come to be a reward just as highly valued.

5. To summarize: While mechanical organization of school routine involves some grave dangers, there is no one of these dangers that cannot be effectively counteracted by simple precautions. *As long as these precautions are taken*, the more thoroughly and elaborately routine is reduced to the plane of automatism, the better for the economical operation of the school. Under this condition the most efficient school is one that "goes like a machine." The moment, however, that this machine spirit enters the work of instruction, the moment that it becomes the master instead of the servant, the moment that it threatens the inspirational and ideal aspects of the educative process, it becomes a menace to the ultimate efficiency of the school and should be instantly reformed.

6. What details of school routine are to be subjected to this process of mechanical organization? The answer to this question will vary somewhat with the grades represented in the school. In the lower grades very little dependence can be placed upon individual responsibility; almost every detail must be looked after explicitly by the teacher, and the more quickly all details are reduced to system and order, the more effective will be the routine work of the school. In the upper grades, on the other hand, a greater degree of individual responsibility can be assumed, although there is little doubt that the present tendency, especially in the high school, is toward too little mechanical organization.

In general, for the elementary school, the following matters will need specific attention and persistent drill at the outset.

The Passing of Lines. For the expert observer, there is probably no detail of school management that indicates more clearly the efficiency or inefficiency of the teacher than the manner in which the lines pass to and from the room. Are the pupils quiet and orderly in line? Do they move energetically (even though slowly) or do they "shuffle" along and crowd and stumble? Whether pupils should be required to "keep step" is a mooted question, but no very cogent arguments are advanced against this procedure, and it adds much to the ease and facility with which the lines pass. In a "first-class" school the lines should pass quietly and in an orderly manner when they are not supervised; but orderly lines that are supervised are greatly to be preferred over disorderly lines that are unsupervised.

Especial care should be observed in moving lines up and down stairs. The best plan is rigidly to prohibit any running or "skipping steps" on the stairs at any time. If this habit is eliminated, the lines will pass quietly even in case of fire or other accident that might give rise to a panic. The serious responsibility that rests with the teacher in this connection cannot be too strongly realized. The only insurance against panic in case of fire is perfect discipline. If bad habits are allowed under normal conditions, no strength of will can bring order out of chaos on an unusual occasion.

Fire Drills. The fire drill is generally recognized as absolutely essential in a large school. Drills should be held at least once a month, and oftener at the opening of the term.

They should be given at the time when they are least expected both by pupils and by teachers. Ordinarily, the best method of emptying the building is to follow the normal formation of lines. Thus every dismissal will add stability to the fire discipline. Unless the cloakrooms are difficult of access, pupils should take their wraps as they pass out. This preserves the regular routine and, when carefully drilled upon, occupies a minimum of time. Of course, where the danger of a minute's delay would imperil life, the fire drill should not include this operation. The construction of the building, the arrangement of exits, and the capacity of the stairways must all be considered in this matter. It is the writer's opinion that the pupils should not be permitted to run downstairs in the fire drill. The danger of falling is not to be slightly regarded, and an accident of this sort is far more apt to cause panic and confusion than anything else. However, in buildings that are recognized "fire traps," even this may be necessary. If it is, drills should be more numerous, beginning with walking, and then gradually increasing the pace until a maximum has been reached.

In passing from the exits to the gates, it is good practice to insist upon unbroken lines. This avoids confusion at the gates, and adds much to the appearance of the dismissal when viewed by passers-by. The line formation should also be preserved until the pupils reach their seats on entering the building.

7. *Signals.* The verbal signal, "Attention!" should be understood by pupils from the earliest grade to mean a definite attitude of mind and body. Psychology teaches that the attentive attitude of mind is closely related to an attentive attitude of the body. Should the hands be folded

upon the desk, or the arms folded at this command? There is certainly no valid objection to either of these procedures, and either will effect a very desirable end — that, namely, of keeping the fingers from picking up pens or pencils that may be lying upon the desk, or from playing with inkwell-covers: activities which may be initiated quite unconsciously and yet which may easily result in some distracting noise. In general, the command, "Attention!" should be the stimulus for the habitual adjustment of the body in a certain definite posture: head erect, eyes turned toward the teacher, hands or arms folded (preferably the former), feet flat on the floor, instant cessation of all other school work or activity.

Other signals may be either verbal or visual. "Turn," "stand," "pass" — or counts, "one," "two," "three," or simple gestures with the hand or head — may be used to indicate that the pupils are to rise and pass. In any case, with the seats and desks constructed as they are in most American schools, three signals are necessary for this movement, and each signal should represent a definite adjustment that should be carefully explained and formally drilled upon until it is a matter of habit. Pupils should arise always upon the same side of the seat; the feet should be moved to a definite position upon the first signal; and the body should rise with equal definiteness and precision at the second signal. Ten minutes spent in carefully explaining and exemplifying each of these movements will be time saved.

8. *Passing to the Blackboard.* It is strict economy

to have each pupil assigned to a definite place at the blackboard and to insist that, whenever blackboard work is required, he pass to this place. If this is done, uniform movements can be made to and from the board. Generally it is necessary to have one row pass at a time, and in order to do this with celerity and dispatch, initial drills are necessary.

9. *Passing to the Recitation Bench.* If the classes that recite move forward to the front of the room, similar habits must be established to insure economy in making the change. Because of the frequency with which this movement is necessary in ungraded schools, it is probably well, in such schools, to have all signals, save that for attention, visual, rather than verbal.

10. *Distributing and Collecting Wraps.* Where the location of cloakrooms prevents the passing of lines through them so that each pupil may take down his own wraps, it is necessary to inaugurate a system of monitors to bring the wraps into the schoolroom, distribute them, and, when the session is resumed, collect them and hang them in the cloakroom. At best this system will take up valuable time in its operation, and therefore pains should be exercised to make the movement as effective and economical as possible. The first or the last pupil in each row is the logical monitor. These should be carefully drilled in their duties, being directed to move quickly but carefully and to hang the wraps of each pupil in the same place on each occasion. After some preliminary drills, a minimal time should be set for the work, and the monitors held respon-

sible for doing it within the time limit. This will tend effectually to check any tendency on the part of monitors to loiter unduly in the cloakrooms.

11. *Distributing and Collecting Books and Materials.* In the lower grades, the writing materials — pens, pencils, and tablets — cannot well be kept in the pupils' desks without much inconvenience. Pens and pencils are easily lost or broken, and tablets and writing books become soiled. In some schools a lesson requiring the use of these materials is always preceded by several minutes' waste of time in providing certain delinquents with the necessities. It becomes requisite, therefore, to keep these materials in a closet or drawer provided for the purpose and to distribute them either at the beginning of the session or whenever they are needed. For sanitary reasons, each pupil should have individual materials, especially pens and pencils, and this necessity still further complicates matters. A good plan is to have for each row a holder made of a pasteboard box with holes punched in the cover into which pencils and pens can be inserted. These boxes can be quickly passed, each pupil taking his pen or pencil from the holder or returning it. By this means, too, the teacher or a monitor can see that the pencils are properly sharpened before the session begins, and that the pen points are in good condition. Tablets can be distributed in the same way. Up to the fifth grade it is probably economy to follow this method, although it takes some time. This is compensated, under an effective system, however, by the time saved at the points indicated above.

Where free text-books are furnished, it is often prescribed that the books shall be collected each night, locked in cases, and distributed in the morning. This seems to be a laborious procedure for rather insignificant results, but it has many virtues. In the first place, it prevents the loss of books. The teacher can tell at a glance whether a book is missing from the equipment of each pupil. In the second place, it insures the cleaning out of the desks every day, and so prevents the accumulation of débris that is otherwise inevitable. In the third place, it necessitates the packing of books in a uniform order, and thus makes possible the taking of any book without overturning the contents of the desk in order to find the book wanted. The system requires efficient monitorial service, but, once well established, its operation need occupy but a brief period at the beginning and at the close of each daily session. Formal drills are again necessary at the outset to insure order, uniformity, and celerity in the required movements.

12. *Orderly Arrangement of Books and Materials in Desks.* If books and materials are not distributed and collected daily, the teacher should at least give explicit directions relative to the packing of these articles in the desks. A definite order should be prescribed and carefully demonstrated. The pupils should be given drills in taking books, tablets, pencils, etc., from the interior of the desk at the command of the teacher, and without bending down to see where the required article is located, or tossing the contents of the desk about in order to get at

it. At the beginning of each study period, the necessary materials should be secured, without noise or confusion, at a simple signal from the teacher. At the beginning of the recitation they should be replaced as quickly and quietly.

13. *Insuring Tidiness of the Classroom.* There are many conditions in a classroom that make for untidiness. Papers are easily dropped upon the floor, pencil sharpenings are scattered about, ink is spilled, bits of crayon fall from the chalk trays and are tramped into the floor, muddy shoes leave visible and tangible traces in wet weather. All of these conditions must be counteracted by specific routine. It is safe to lay down a rule that no work done on paper should escape the supervision of the teacher; an obvious corollary of this rule is that an overplus of written work should be avoided. If this policy is carried out rigidly, the tearing up of papers or the leaving them upon the desks where they will readily drop to the floor, will be easily prevented. Papers should be collected by monitors or passed to the front of each row after every period when written work is required. It is not enough that such papers be inspected by the teacher; the pupils should have visible evidence of this. Consequently the papers will, as a rule, be returned with the corrections, and the corrections will be studied by the pupils. This done, the papers should again be collected and either filed for future reference or destroyed. The former plan will enable the teacher or principal to make comparisons of the work done by pupils at successive periods during the term, while knowledge that the papers

are to be preserved and filed for this purpose will probably have a salutary effect upon the pupils' work. In any case, it is safe to say that a continually overflowing waste-paper basket is generally an indication of ineffective teaching, although if waste paper is to be found anywhere in a schoolroom, it should certainly be in a basket.

Pencil sharpenings will not be a source of untidiness if the pencils are collected and a monitor appointed to look after their sharpening either after school or before the opening of the session. This plan is commonly followed in the lower grades, but it could be made general throughout the elementary school with beneficial results. Pencil sharpeners which do the work effectively can be purchased for a small outlay and should form a part of the material equipment of every school.

For the spilling of ink by pupils who are at work at their desks, there is probably no remedy except verbal cautioning and a strenuous treatment of such lapses as are plainly due to carelessness, but the ink-spilling that is caused by the hurry of the teacher or pupil to get the inkwells supplied just before a writing exercise can be eliminated by routine. There should be a daily inspection of all inkwells to insure that each is well supplied before the beginning of the day's work. This is another matter of routine that can be looked after by an efficient monitor.

Chalk trays should be cleared of all crayon at regular intervals — preferably at the close of each day's work. This will eliminate the small pieces that otherwise collect in the trays and are easily scattered upon the floor. The

teacher should inspect the chalk trays at the beginning of each session and make sure that there is sufficient crayon for the work of the day. Holding a class of twenty pupils for one minute while a crayon box is passed to supply one pupil is to throw away just twenty minutes of valuable time. It is through such drains as these that so much of the brief time spent by the child in school is time wasted.

Muddy shoes will probably form the least remediable source of untidiness. Yet the efficient teacher can, by strenuous effort, develop in his pupils habits that will, in a measure, counteract this evil. If pupils understand that their shoes are to be cleaned before lines form, and if rather unpleasant consequences uniformly follow upon a failure to fulfill this requirement, it will not take long to build up an effective routine in this matter. In some schools, boys are expected to blacken their shoes each morning before coming to school. This is an excellent habit to develop, and it is not difficult to make this requirement and keep to it, provided that one meets with no decided opposition from parents. A habit of this sort, well developed, will, of course, do much to keep the floors free from dirt.

14. *Leaving the Room.* The beginning teacher is apt to encounter some trouble with regard to this matter; for in view of the rather delicate nature of the subject, it is difficult to deal with it frankly and effectively. When a teacher is sure of himself and has the discipline of his room well established, pupils in all grades above the fourth may be permitted to leave the room, under certain restrictions, without asking permission; but it is not wise for the

beginning teacher to grant this privilege at the outset, for with the average child constituted as he is, it is a privilege that is certain to be abused. On the other hand, the constant interruption of pupils asking for permission is a serious source of inconvenience. The best plan is to say nothing about the matter until the interruptions become so numerous as to be a disturbing factor. When this time comes, the pupils who ask most frequently should be spoken to privately to discover, if possible, whether the necessity really exists. In case the pupil states that it is necessary to leave the room more than once in a session, the teacher should request a written statement from parent or physician to that effect, and then make a special case of this particular pupil, allowing him the privilege without requiring a request each time.

With the normal child, however, regular habits should be speedily established with regard to the bodily functions. With a recess each session, the number of pupils requesting to leave the room during class hours should be reduced to a minimum. In some schools the lines are passed to the latrines and closets at each recess before being allowed to go upon the playground, and this will gradually control the difficulty. One teacher of the writer's acquaintance, who was greatly troubled by this matter in a new school, kept his boys after dismissal one evening and talked to them good-naturedly but seriously about the necessity for forming regular habits, suggesting that the bowels be encouraged to move every morning before school time. The talk had a good effect, not only

upon the discipline of the school, but also upon the health of the pupils. This matter is comparatively simple for a male teacher to deal with in the case of boys, but presents greater difficulties for a woman teacher. Nevertheless, even in such cases, private admonition would probably have a good effect, and a tactful teacher should be able to make suggestions without causing embarrassment to either party.

In general, it is safer to run the risk of having the privilege abused than to run the counter risk of causing bodily injury to the pupil, especially through the retention of urine. For the beginning teacher, a policy of wide latitude in this matter is far safer than one of close restriction.

15. *Neatness of Written Work and of Blackboard Work.* One of the most accurate indices of a teacher's efficiency is the character of the papers and of the blackboard work that his pupils produce. These matters may not appear, at first thought, to be of profound importance, and it is true that their significance may in certain instances be overestimated. Nevertheless scientific investigation [1] indicates that accuracy in handwriting varies directly as general school intelligence; in general, the better the handwriting — that is, the more accurate — the higher the mental attainments of the pupils. In any case, the ability to train pupils to produce accurate written work is a fairly good index of the teacher's general capacity in habit-building.

[1] Cf. A. L. Gesell: "Accuracy in Handwriting as Related to School Intelligence and Sex," in *American Journal of Psychology*, 1906, **vol. xvii, pp. 394–405.**

Accurate written work, whether on paper or on the blackboard, involves several specific features, each one of which can and should be reduced to the plane of automatism. (*a*) The writing itself must be *legible*. This means that the letters must be uniform in height, and that each letter must possess sufficient individual peculiarity to permit its ready recognition. (*b*) The *spaces* between letters and between words must be uniform and sufficient in extent. (*c*) The *arrangement* of the written work must present a neat appearance, revealing through indentations, headings, etc., the main relations of the data expressed. (*d*) The *punctuation* should be meaningful and adapted to the conventional but none the less important functions that the different punctuation marks fulfill. (*e*) The name of the pupil, the date, and the name of the school or number of the grade or room should be placed at the head of all papers in a uniform manner. In blackboard work the name of the pupil, at least, should appear, and it should uniformly be written neatly and without superfluous flourishes (a trivial matter, it may seem, but a very important index of the "taste" that is being developed in pupils).

Advice with regard to the details just mentioned is very frequently couched by supervisors in very general terms: "Get better writing"; "Make your blackboard work neater"; "Improve the form of your papers." This advice frequently fails of effect for the reason that the teacher does not recognize the *specific* nature of the habits that he attempts to impress. Neat papers and neat black-

board work involve a number of little, specific habits, and each of these must be taken up and drilled upon apart from the others, and, in some measure, apart from the content or thought of the work that is being expressed.

16. From the foregoing discussion it is manifest that there will be a number of monitorial positions to be filled by pupils whenever this system of routine is adopted. While some of these monitors will be chosen from those occupying convenient seats, the majority of the positions, and especially those involving some measure of trust or responsibility, may be given as rewards for good work. This phase of the subject will be discussed in a later section.

REFERENCES. — White: *School Management*, pp. 94–99; Roark: *Economy in Education*, pp. 40–44; J. S. Taylor: *Class Management and Discipline*, New York, 1903, pp. 42–43; Baldwin: *Art of School Management*, chs. iv, vi; Landon: *School Management*, pp. 109–111.

CHAPTER IV

The Daily Program

1. To secure a maximal degree of efficiency in its work the school must make the most effective use of the time at its disposal. This is a complex problem, involving the adjustment of several determining factors. Among these the following require detailed consideration: (*a*) the length of the school year, (*b*) the length of the school day, (*c*) the time devoted to recesses and intermissions, (*d*) the subjects required, (*e*) the relative importance of these subjects at different levels of the child's development, (*f*) the relation of different types of subject-matter to fatigue, (*g*) the general factors of fatigue, and the significance of these factors to recesses, rest-periods, etc., (*h*) the time devoted to general exercises of all kinds, (*i*) the number of pupils and the number of separate classes for which each teacher must be responsible. As in the preceding discussions, these factors will be treated in their relation to the classroom teacher rather than in their broader significance to the duties of the principal, the superintendent, or the school board.

2. *The Length of the School Year.* This is commonly determined either by statutory enactment or by the decision of local school boards. In graded schools

it is usually either thirty-six or forty weeks; in rural schools seldom more than thirty-six weeks, and generally much less. The tendency at present is probably toward a longer school year, both in the cities and in the rural districts. The length of the school year has two relations to the daily program: (*a*) If the school year is very short, the daily program must emphasize the studies that are admittedly important in elementary education, and minimize those that are less important; thus a city school that is in session forty weeks of the year might devote perhaps thirty minutes each day to music, while a rural school that is in session only twelve weeks could not possibly justify so long a period. (*b*) If the school year includes all or a part of the summer months, the daily program must be so adjusted as to give the maximum of "heavy" work during the cooler season of the year and the minimum during the heated season.

3. *Length of the School Day.* This is, of course, the prime controlling factor in the gross structure of the program. The traditional length of the school day in the United States is six hours, — 9 A.M. to 12 M. and 1 P.M. to 4 P.M. Although this is somewhat shorter than the school day in foreign countries — notably Germany — the prevailing tendency seems to be still further to abbreviate it. At the present time there are very few city schools that have a six-hour school day, and the rural schools are coming to cut it down, generally by giving a somewhat longer noon intermission. In practically all schools the school day for the first two years is from thirty to sixty

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minutes shorter than that for the remaining years of the course. The classroom teacher, as a rule, has nothing to do with determining the length of the school day, except with the lower classes in ungraded schools. In such cases, and in the absence of rulings of the board to the contrary, the teacher should, if possible, dismiss the first and second grade pupils not later than 11:30 in the morning and 3:15 in the afternoon. The third-grade pupils may be kept until noon for the morning session and until 3:30 for the afternoon session. This is sometimes out of the question in rural schools where the younger pupils must wait for their older brothers and sisters. In such cases the program should be so arranged as to permit the first and second grade pupils to do the lightest part of their work in the later periods. In good weather, and if other conditions are favorable, they should be permitted to play out of doors.

4. *Time devoted to Recesses and Intermissions.* This must, in all cases, be subtracted from the total time of the school day in order to determine the amount available for actual school work. With two sessions of three hours each, the rule is invariable to give at least fifteen minutes in the middle of each session to "free play" in the open air. When the afternoon session is reduced to two and one half or to two hours, as it is in many of the city systems, the afternoon recess is shortened to ten minutes for all grades up to the fifth or sixth, and omitted entirely for grades above this point. The tendency to do away with all recesses is probably to be condemned in the light

of studies on fatigue.[1] It is probably best to have the recess in each session begin at a point midway between the opening and close of the session, thus making the periods after recess a little shorter than those before recess.

5. *The Subjects to be Taught.* The responsibility of determining the subjects of instruction seldom rests with the classroom teacher. In case the local or county authorities do not prescribe a definite course of study, that prescribed by the state department of public instruction should be used. The teacher frequently has some latitude, however, with certain "accessory" subjects (drawing, music, nature study, agriculture, etc.), especially in schools that are not under the control of a principal or superintendent. In case such discretionary power is granted, it is a wise rule to teach only such of the accessory subjects as one can handle effectively. If, for example, a teacher is weak in music and strong in drawing, the latter is the one to emphasize if a choice is permitted. Much time is wasted in the attempt to teach either music or drawing by those who have neither a special aptitude nor a special training for such work. In general, the fundamental subjects should be provided for first, and then whatever time can be spared may be devoted to the accessory subjects.

[1] "Recess time has been displaced in many places by brief physical exercises in the schoolroom. The school appears more mannerly, more subdued, more orderly. By this means there is not so much chance for lowering the moral tone by speech or action on the school grounds. But how about the physical condition of the child?"—W. A. BALDWIN: *Industrial Social Education*, Springfield, Mass., 1903, p. 46.

6. *The Relative Importance of the Various Subjects.* The time to be allotted to each subject manifestly depends very largely upon the importance of the subject in relation to others. This must frequently be determined by the teacher, although in many systems definite rulings are made by the superintendent which relieve the teacher from responsibility in the matter.

The prevailing practice in American schools seems to indicate that the "form" studies (reading, writing, arithmetic, spelling, and language) are more important in the elementary school than the content studies (geography, history, literature, physiology, etc.). Dr. B. R. Payne,[1] summarizing the programs of ten typical American cities, finds that the formal studies receive sixty-two per cent of the assigned time, while the content studies receive but little more than thirty per cent. In spite of the opinion of many competent authorities[2] that more "content" work

[1] B. R. Payne: *Public Elementary School Curricula*, New York, 1905, p. 39.

[2] For example, Payne, *op. cit.*, pp. 197 ff., constructs what he terms an "ideal" course of study for American schools in which he allots to the various subjects the following per cent of the total time: Scripture opening exercises, 10%; English (including reading, spelling, writing, grammar, literature, and oral and written composition), 27.5%; arithmetic, 12.5%; geography, 7.5%; history and civics, 7.5%; nature study, 7.5%; drawing, 5%; music, 5%; physical training, 7%; and hand work, 10%. This may be profitably contrasted with his findings for the ten cities mentioned above: opening exercises, 3.1%; reading and literature, 20.7%; writing, 4.7%; spelling, 4.7%; language and grammar, 14.4%; arithmetic, 17.3%; geography, 7.2%; history and civics, 4.8%; nature study, 3.4%; physiology, 0.7%; physical training, 4.7%; drawing, 6.4%; music, 5.1%; manual training, 2.4%. It will be noted that arithmetic, language, and drawing are cut down in Mr. Payne's pro-

should be given in the elementary school, the prevailing practice receives some support from theoretical considerations. The preadolescent years which are represented by the elementary school seem preëminently to be the time for drill, discipline, and the formation of habits, and it is these things that the so-called "form" studies emphasize. Again it is fairly well established that an overemphasis of content work must, by a law of compensation, detract from the efficiency of form work. In other words, the evidence of practical life indicates that pupils who have had the advantage of a very "rich" curriculum — a curriculum overloaded with "content" subjects — are weak in the formal requirements when they leave the elementary school.

7. Wherever the young teacher has an option in this matter, then, it would seem to be the wise plan to follow the prevailing practice.[1] From the standpoint of program-building, this conclusion carries with it several corollaries: (*a*) the best periods of the day should be given to the formal subjects; (*b*) if sacrifices are necessary, the content subjects should be sacrificed, at least in the lower grades; (*c*) the bulk of the time should be devoted to the formal work; (*d*) if any extra periods are available — say five-minute periods just before the noon hour, or before the clos-

posed allotment, while the time to be given to opening exercises, history, geography, and manual training, is decidedly increased.

[1] This is not to imply that one should do the "safe" thing from motives of policy. If the teacher is convinced that the content work should receive the greater emphasis, he should lose no opportunity to act in accordance with his honest convictions.

ing hour — they should be given to drills upon those phases of formal work in which pupils show especial weakness.

Both this conclusion and its corollaries are somewhat qualified by the factors of development. The seventh and eighth grades belong to the adolescent period of growth, and it is generally agreed that, at this time, there should be some relaxation of drill, and a greater enrichment of the curriculum from the content standpoint. Measures looking toward these ends can be easily adopted if the drill work has been well done in the preadolescent period, and the programs for these upper grades should be constructed with reference to this qualification.

8. *The Relation of Subject-matter to Fatigue.* The above conclusions must be submitted to another and broader qualification. The "form" subjects are, in general, more fatiguing than the "content" subjects,[1] hence they are not only to be given the most favorable periods of the day, as is demanded by their greater importance, but they are also to be arranged in such a manner that two fatiguing subjects will not follow one another directly. It is also to be remembered that the periods devoted to the form subjects must not be too long, else the effectiveness of the work will be decreased through fatigue. Thus it is sometimes well to give two short periods rather than one long period to certain of the formal drills, placing a content subject in the intervening period.

9. *The General Factors of Fatigue.* The capacity for

[1] Mathematics, formal language work (including spelling, penmanship, and formal grammar), formal gymnastics, and foreign languages are most fatiguing according to the best authorities; nature study, geography, history, singing, and drawing are least fatiguing. See citations, *Educative Process*, p. 341.

sustained attention or work manifests itself in rhythms. The best work is never done at the outset, but only after a certain inertia has been overcome and a certain momentum gained.[1] The daily "work curve" or "course of power," on a school day, reaches its highest point between nine and ten in the morning, and then declines rapidly, reaching a minimum at noon. In the afternoon, the high point of the curve is reached shortly after two o'clock, but this point is much lower than the morning's maximum. The decline is not so rapid as in the morning, but the minimum is somewhat lower.[2] It follows from these laws that the heaviest work must be assigned for the morning periods immediately preceding the first recess. The tasks that stand next in "fatiguing power" should be distributed between the morning periods after recess and the afternoon periods prior to half-past two.

Again the rule is subject to qualification. As was shown above, it is not wise to have two difficult subjects — especially two "form" subjects — in succession, nor is it consistent with good hygiene to have in close succession two subjects that involve writing. Practical experience proves that it is best not to have writing or drawing or other exercises requiring minute muscular adjustments immediately after a recess or immediately after the noon intermission. "Class exercises needing steady nerves, such as writing or drawing, ought not to follow a recess or any time of physical exertion." [3]

Recuperation from fatigue can be secured in a complete

[1] For authorities, see O'Shea, *Dynamic Factors in Education*, New York, 1906, p. 282.

[2] See *Educative Process*, pp. 340 ff.; also O'Shea, *op. cit.*, pp. 292 f.

[3] A. N. Raub: *School Management*, Philadelphia, 1897, p. 73.

form only by nutrition and sleep, but a partial restitution may be accomplished through (1) "free play" (that is, spontaneous activity preferably in the open air) and (2) relaxation. Formal gymnastic exercises have been proved to be more fatiguing than any other school "study" except mathematics.[1] This does not mean, of course, that there should be no place for gymnastics in the program, but simply that gymnastics must not be looked upon as recreative exercises in the popular sense of the term.

10. *General Exercises.* It is customary in nearly all schools to devote some time, generally at the opening of the morning session, to exercises of a general nature. These may fulfill several functions: (*a*) "When carefully planned and intelligently carried out, they constitute an effective remedy for tardiness and irregularity of attendance; they can be made so interesting that the pupils will let nothing get in the way of prompt attendance upon them."[2] (*b*) They offer an opportunity to give explicit instructions in matters that are not touched upon in the regular work of the school. "The teacher will frequently have remarks to make to the school, reproof may need to be administered, or cautions may need to be given. None of these ought to interfere with the recitations of the day."[3] (*c*) They offer an opportunity to begin the work of the day upon a high plane. It is for this reason that devotional exercises of a simple nature are thoroughly in place

[1] Cf. O'Shea, *op. cit.*, p. 222; also *Educative Process*, p. 341.
[2] R. N. Roark: *Economy in Education*, New York, 1905, pp. 49–50.
[3] Raub, *op. cit.*, pp. 73–74.

at this time, unless prohibited by legislative enactment or by public sentiment. *(d)* One's fund of knowledge is drawn in as great amount, perhaps, from general sources as from specific and organized sources. That is, one picks up items of information from general talks, cursory reading, casual observation, and these unrelated facts form no small part of one's intellectual capital. They may be less valuable, less accurate, than the items of knowledge obtained by sytematized study; but they are important, nevertheless, and some provision for their gleaning should be made by the school. General exercises probably offer the best medium for this purpose.

In arranging the daily program, then, time should be allowed for general exercises of some description, and it is perhaps best to place them at the beginning of the morning session. From five to fifteen minutes may be profitably utilized in this way; probably the average in the better schools is ten minutes. Here, if anywhere, it is quality rather than quantity that counts.

11. *The Number of Pupils and the Number of Classes.* These two factors are by far the most troublesome to the classroom teacher in making out a program. The problem is far from simple in the graded school where a single teacher has but one grade divided into two classes, one half year apart in age and classification. Where two grades with three or four different classes are given to one teacher, the problem is much more complicated, but the greatest complication is met with in the ungraded schools where one teacher must teach all classes in

all subjects. In the discussion of the problems involved in adjusting the program to these conditions, it will be well to begin with the simple conditions of the graded school.[1]

The Graded School Classroom Program. Assuming the room to contain but one grade divided into two groups, the members of each of which are approximately equal in capacity and attainments (and this assumption must be made in practice), the first point is to determine the number of minutes in the school day. This is done by subtracting from the total time the number of minutes given to recesses, intermissions, and general exercises. The *required* subjects are then enumerated, and the available time divided by the number representing the total of required subjects, in order to see what time can be devoted to each, assuming that all are equal in value. This average time should then be divided by two, in order to determine the length of each study and recitation period. The average length must then be compared with the accepted standard length of the period for the grade in question. These standard lengths of periods as given in the table commonly credited to Chadwick and generally adopted in the United States are as follows: 5–7 years, 15 minutes; 7–10 years, 20 minutes; 10–12 years, 25 minutes; 12–16 years, 30 minutes.

In most grades the quotient of the available time divided by the number of subjects required, and this divided by two in order to equalize study and recitation periods, will be much smaller than the number represented by the above table for the grade in question. It therefore becomes necessary to make an adjustment (1) by determining the subjects that will, from their nature, require no study period, and (2) if the grade standard is not thus secured, by providing that certain subjects

[1] If one teacher has charge of but *one* class, the problem is, of course, extremely simple. But this condition is seldom met with in American schools.

shall be taught only on alternate days. Even then it may become necessary to cut down the time recommended as the standard length of period for the grade in question.

To take a concrete instance: suppose the grade to be the fifth, the sessions to last from 9 to 12 and from 1:15 to 4, with a recess of 15 minutes for each session, and the required subjects to be the following: reading, arithmetic, geography, language or grammar, history, physiology, writing, spelling, nature study, music, drawing, physical training, and "morals and manners." For the "teaching" of these thirteen subjects, 305 minutes will be available, after deducting 30 minutes for recesses and 10 minutes for general exercises. If all subjects are to be given an equal allotment of time each day, it is clear that each will receive approximately 24.2 minutes. This would give 12.1 minutes to each study and recitation period, or about one half the standard period's length — and, moreover, a period far too brief for effective work. It may be assumed, however, that the following subjects will require no study period: music, drawing, physical training, nature study, and morals and manners. But even if these are to be given the standard period (25 minutes for this grade) each day, there will not remain enough time to supply the other subjects adequately. Either alternation of subjects or reduction of the standard length of period is absolutely necessary.

It is perhaps best to try alternation first. It is evident that nature study and drawing can be conveniently alternated. Morals and manners, while constantly emphasized, need receive explicit attention only once a week, but physical training must come every day, although it need not occupy the full period. The following arrangement seems therefore to be justified: drawing or nature study, alternating, 20 minutes daily; physical culture, 10 minutes daily; music, 20 minutes daily, except for one day, when morals and manners may occupy the music period.

The subjects named can be taught to both classes simul-

taneously. There are two other subjects that are amenable to similar treatment, — spelling and penmanship. For the former, at least 20 minutes daily should be apportioned, 10 minutes for study and 10 minutes for recitation. For written recitation, words can be dictated, first to one class, then to the other. Oral spelling can be provided for by assigning the same lesson to both classes. This is especially valuable for frequent reviews on words commonly misspelled. Writing should have at least 15 minutes daily, and may be given to both classes at the same time. The total daily apportionment thus provided will amount in all to 85 minutes. Subtracting this from the 305 minutes available for all work, 220 minutes will be left for apportionment to the subjects requiring study periods, assuming that grammar (or language), history, and physiology are all text-book subjects as they usually are in the fifth grade. The 220 minutes divided among the six subjects will give less than 40 minutes for each, or less than 20 minutes for a study or recitation period. Again, either alternation or shortening the standard is required. The only subjects among the six that will permit alternation are history and physiology. Suppose these to be alternated; the total is now constructively diminished by one. But five subjects will still not permit full 25 minutes for study or recitation. The last resort is a partial shortening of the standard, which is inevitable wherever the contingency arises and where home study is not permitted.[1] This partial shortening can be accomplished by allowing some subjects 25 minutes for study and 20 minutes for recitation. In other words, if a certain period is 25 minutes in duration, the next can be made 20 minutes, the next 25 minutes, and so on. While one class recites, the other studies, so that approximately 45 minutes may be devoted by each class to each of the text-book subjects. In both classes, how-

[1] In the writer's opinion, home study should be permitted not earlier than Grade V, and preferably not prior to Grade VII.

ever, one subject will be limited to 40 minutes. Care should be taken that this will not be a subject of great importance for this grade. The following program is based upon this arrangement. It is inserted merely as suggestive of a possible outcome of the situation that we have imagined. "R" indicates reciting class; "S" indicates study class.[1] "A" is the latter half of the fifth grade; "B" the first half.

Period	Duration	"A" Class	"B" Class
9:00– 9:10	10	Opening Exercises	Opening exercises
9:10– 9:20	10	S. spelling	S. spelling
9:20– 9:30	10	R. spelling	R. spelling
9:30– 9:55	25	R. reading	S. arithmetic
9:55–10:15	20	S. arithmetic	R. arithmetic
10:15–10:30	15	Writing	Writing
10:30–10:45	15	Recess	Recess
10:45–11:10	25	R. arithmetic	S. reading
11:10–11:30	20	S. geography	R. reading
11:30–11:50	20	R. geography	S. geography
11:50–12:00	10	Physical culture	Physical culture
1:15– 1:40	25	S. grammar	R. geography
1:40– 2:00	20	R. grammar	S. grammar
2:00– 2:20	20	S. history or physiology	R. grammar
2:20– 2:30	10	Music	Music
2:30– 2:45	15	Recess	Recess
2:45– 3:10	25	R. history or physiology	S. history or physiology
3:10– 3:30	20	S. reading	R. history or physiology
3:30– 3:50	20	Drawing or nature study	Drawing or nature study
3:50– 4:00	10	Music, 4 days, morals and manners, 1 day	

The above program has some apparent weaknesses. Spelling, for example, is given the first period in the morning, while in most schools it is placed at some less important period. The

[1] "The best programs show what is being done at the seats as well as what is being done in recitation." — Akron, Ohio, *Course of Study*, 1904, p. 174.

disposition, however, to place drill subjects at unfavorable periods is probably to be condemned, and to give the first school period to spelling is, especially in the intermediate grades, a commendable, although not a common, practice. Penmanship is given the period just prior to the morning recess. This is open to criticism in that it makes a writing exercise follow arithmetic; it is justified only on the ground that the 15 minutes just prior to recess is too brief for any other subject that is entitled to a favorable morning period, and also by the fact that writing should not come immediately after any recess or intermission because of the difficulty of making fine adjustments after vigorous exercise; thus by a method of elimination the period assigned seems to be the only period available. The 10 minutes just preceding the noon intermission are not, perhaps, the best time for physical exercises; but in view of the fact that these are very fatiguing whenever effectively carried on, it is difficult to find a period when they will not have a deleterious influence upon other work. The division of the music into two periods could also be objected to. The last 10 minutes of the day, however, are frequently devoted to singing, and the arrangement indicated may be interpreted as meaning that this is to be the policy here. The other music period just preceding the afternoon recess may profitably be devoted to instructional and drill work in music. All of the text-book subjects are allotted 45 minutes, except geography of the "A" class and grammar of the "B" class. It would be better, of course, if the "cut" could come altogether from the content subjects, but this is impracticable because the content subjects aside from geography — physiology and history — have already been reduced in time-allowance by alternation.

The Three-class Program. If three classes are in charge of one teacher, there is no alternative but to shorten the periods for recitation and increase the time devoted to seat work, unless, as is frequently the case, different classes may pursue some

assignments in common. Supposing this not to be the case however, it is clear that two thirds of the time allotted to each text-book subject must be devoted to seat work, and one third to recitation. For an example of this type of program, let us assume that the teacher has the following classes: IV "A," V "B," and V "A." In all probability the course of study will show practically the same subjects, except that two reading lessons will be prescribed for the fourth grade to replace physiology and history. Practically the same disposition can, therefore be made of the music, drawing, nature study, morals and manners, and (perhaps) spelling and penmanship. Thus approximately 220 minutes will be available for distribution among the five text-book subjects. By taking 5 minutes from one of the other branches, — perhaps music will be best able to stand the sacrifice, — this total will be increased to 225 minutes. The advantage of doing this is obvious: each of the five text-book subjects can be allotted 45 minutes, and this time can be divided into a study period of 30 minutes and a recitation period of 15 minutes. Needless to say, the study periods are too long and the recitation periods too short; but this will always be the case where more than two classes are placed in charge of a single teacher. The following program indicates the advantage of the division into 45-minute units: —

Period	Length	V "A" Class	V "B" Class	IV "A" Class
9:00– 9:10	10	Opening exercises	Opening exercises	Opening exercises
9:10– 9:30	20	Spelling	Spelling	Spelling
9:30– 9:45	15	S. arithmetic	S. arithmetic	R. reading
9:45–10:00	15	S. arithmetic	R. arithmetic	S. arithmetic
10:00–10:15	15	R. arithmetic	S. reading	S. arithmetic
10:15–10:30	15	Writing	Writing	Writing
10:30–10:45	15	Recess	Recess	Recess
10:45–11:00	15	S. reading	S. reading	R. arithmetic
11:00–11:15	15	S. reading	R. reading	S. geography
11:15–11:30	15	R. reading	S. geography	S. geography
11:30–11:45	15	S. geography	S. geography	R. geography
11:45–12:00	15	S. geography	R. geography	S. reading

Period	Length	V "A" Class	V "B" Class	IV "A" Class
1:15– 1:30	15	R. geography	S. grammar	S. reading
1:30– 1:45	15	S. grammar	S. grammar	R. reading
1:45– 2:00	15	S. grammar	R. grammar	S. language
2:00– 2:15	15	R. grammar	S. physiology, history	S. language
2:15– 2:30	15	Divided between physical culture and music		
2:30– 2:45	15	Recess	Recess	Recess
2:45– 3:00	15	S. physiology, history	S. physiology	R. language
3:00– 3:15	15	S. physiology	R. physiology	S. reading
3:15– 3:30	15	R. physiology	S. arithmetic	S. reading
3:30– 3:50	20	Drawing or nat. st.	Drawing or nat. st.	Drawing or nat. st.
3:50– 4:00	10	Music, 4 days a week, morals and manners, 1 day		

Upper Grade Programs. On account of the numerous lines of work demanded by modern courses of study for the upper grades, it is imperative that one or two assignments be prepared at home. A brief reference to either of the above programs will show how much the problem of program-making would be simplified if at least one subject could be assumed in each class to be provided for by home study. Above the sixth grade, however, where effective periods must be at least 25 minutes in length, it would be impossible to arrange a satisfactory program without this provision.

The program (page 67) suggests a possible distribution of the eighth-grade work. The "A" class prepares arithmetic and spelling at home, the "B" class, history and spelling. The text-book periods are, with three exceptions, 30 minutes in duration. (The abbreviation "H.P." indicates home preparation.)

It will doubtless be practicable in most instances to have the two classes study the same literary masterpieces; this would enable both classes to "recite" literature at the same period. No time is allotted for physical exercises, and if these are prescribed, it will be necessary to cut two more periods to 25 minutes.

The Ungraded School Program. An inspection of the three-

Period	Length	"A" Class	"B" Class
9:00– 9:10	10	Opening	Opening
9:10– 9:20	10	Spelling (H.P.)	Spelling (H.P.)
9:20– 9:50	30	R. arithmetic (H.P.)	S. arithmetic
9:50–10:20	30	S. grammar	R. arithmetic
10:20–10:30	10	Writing	Writing
10:30–10:45	15	Recess	Recess
10:45–11:15	30	R. grammar	S. grammar
11:15–11:40	25	S. physiology or civics	R. grammar
11:40–12:00	20	Drawing or nature study or agriculture	
1:15– 1:45	30	S. history	R. history (H.P.)
1:45– 2:15	30	R. history	S. physiology or civics
2:15– 2:30	15	Music	Music
2:30– 2:45	15	Recess	Recess
2:45– 3:10	25	R. physiology or civics [1]	S. literature [1]
3:10– 3:35	25	S. literature [1]	R. physiology or civics [1]
3:35– 4:00	25	R. literature [1]	R. literature [1]

class program (page 66) will indicate the difficulties that are to be overcome when the number of classes is increased beyond two. The recitation periods must be greatly abbreviated, the study periods proportionately lengthened, and the classes combined wherever the effective teaching of the subject will in any measure permit combination.

The most practical arrangement for an ungraded school is probably that proposed by the late Dr. Emerson E. White.[2] According to this plan, the time of the teacher is equitably distributed among three classes of pupils, representing approximately the primary, intermediate, and grammar grades. The recitation periods are 20, 25, and 30 minutes in length, the longer periods being assigned to the older pupils. Provision is made for frequent changes of work during the long study

[1] Manual training may be provided for by alternation in these periods.

[2] E. E. White: *School Management*, pp. 86–94.

periods, especially for the younger pupils. Modifications of this general plan have been incorporated into several state manuals. The following four-class arrangement is a suggestive variant.

A FOUR-CLASS PROGRAM RECOMMENDED FOR UNGRADED SCHOOLS IN NEW YORK [1]

(Exercises italicized are for the reciting class.)

Time	1st Year	3d Year	6th Year	8th Year
9:00– 9:10	Opening ex.	Opening ex.	Opening ex.	Opening ex.
9:10– 9:30	*Reading*	Reading	Reading	Reading
9:30– 9:50	Copying	Reading	Reading	*Reading*
9:50–10:10	Employment	*Reading*	Arithmetic	Arithmetic
10:10–10:25	Dismissed	Arithmetic	*Reading*	Arithmetic
10:25–10:35	Recess	Recess	Recess	Recess
10:35–10:45	*Number*	Arithmetic	Arithmetic	Arithmetic
10:45–11:05	Drawing	Arithmetic	Arithmetic	*Arithmetic*
11:05–11:25	Employment	*Arithmetic*	Arithmetic	History
11:25–11:45	Dismissed	Reading, Spelling	*Arithmetic*	History
11:45–12:00		English	Geography	*History*
1:00– 1:05		Singing or other exercises		
1:05– 1:20	*Reading*	Reading, Spelling	Geography	English
1:20– 1:30	Copying	*Reading, Spelling*	Geography	English
1:30– 1:45	*Drawing* [2]	*Drawing* [2]	*Drawing* [2]	*Drawing* [2]
1:45– 2:00	*Physiology* [3]	*Physiology* [3]	*Geography*	English
2:00– 2:20	Dismissed	Miscellaneous	Phys., English	*English*
2:20– 2:35		*Writing*	*Writing*	Physiology
2:35– 2:45	Recess	Recess	Recess	Recess
2:45– 2:55		General lessons		
2:55– 3:00	*Miscellaneous*	Geography	Phys., English	Civil government
3:00– 3:15	Tracing	Geography	*Phys., English* [4]	*Phys.*, civ. gov. [5]
3:15– 3:30	Dismissed	*Geography*	Spelling	Civil government
3:30– 3:45		Dismissed	Spelling	*Civil government*
3:45– 4:00			*Spelling*	Special work

[1] 49*th Annual Report*, Department of Public Instruction, New York, 1903, Appendix 4.

[2] Drawing: two or three classes; two recitations a week.

[3] Physiology: two classes; two or three recitations a week.

[4] English: two classes; three recitations a week; more if possible.

[5] Civil government may be alternated with some other study.

12. The program-maker in the elementary school cannot fail to be impressed with a very grave danger that is inherent in the present tendency to enrich the curriculum by the addition of a host of new subjects. How difficult it is to find time for the adequate presentation of accepted subject-matter is quite evident from the above discussion. The length of the periods for the various grades is the result of long years of schoolroom practice and seems to indicate both a maximal and minimal time for effective and economical work. To shorten periods below this limit is to risk a serious waste both of time and energy. Moreover, the addition of each new subject must, if carried beyond a certain point, detract from the effectiveness of instruction in other subjects. There is a law of mental activity somewhat analogous to the law of diminishing returns in agriculture. Variety up to a certain point is essential to effective mental work; variety beyond that point promotes dispersed attention and inadequate apperception. In the struggle to "teach" everything that is now demanded, the school is forced to give almost every subject a superficial treatment. This is wrong both from the standpoint of school economy and from the standpoint of mental development.[1]

13. *Holding to the Program.* Practically all principals

[1] A recent writer in the *School Journal* proposes a possible reform in this direction by advocating that all the subjects of major importance — in brief the "three R's" — be given the bulk of the time in the elementary school, and that the "accessory" subjects be taught by lectures, readings, and exercises involving a minimal expenditure of energy on the part of the child.

and superintendents of schools agree that the beginning teacher should hold rigidly to the program and time-table. This is, at first, a rather difficult matter. There are innumerable temptations to hold a class a moment with one subject until a certain point has been made or a certain conclusion driven home. It is, of course, debatable whether this is not justified, but it is the writer's experience that the results are much better if the time-table is adhered to rigidly. There would seem to be a sound reason back of this conclusion. In the first place, it is comparatively simple to establish the habit of adjusting one's work in preparation to fit the period for which it is intended; thus the teacher, after a little experience, is able to bring each lesson to a satisfactory finish within the period allowed. In the second place, if the teacher begins to extend or abbreviate the periods, it soon becomes impossible to designate the point at which work is to be varied. "Going over" the allotted time becomes a habit that entails much waste and no little injustice. In the third place, almost every teacher is apt to prefer some subjects to others, and, unless a strenuous effort is made to be impartial, it will be practically impossible to escape lengthening the favorite periods.

REFERENCES. — White: *School Management*, pp. 86–94; Roark: *Economy in Education*, pp. 64–72; Seeley: *A New School Management*, ch. v; Baldwin: *Art of School Management*, pt. iv, ch. v; M. V. O'Shea: *Dynamic Factors in Education*, New York, 1906, ch. xviii.

CHAPTER V

Regularity and Punctuality of Attendance

1. Irregularity of attendance is a serious source of waste in all grades of the school; but for obvious reasons it is most troublesome in the lower grades where the stimulus of the teacher and of class instruction is so essential to progress. Delinquent pupils not only miss the work that has been done during their absence, but they necessarily retard the progress of the class when they return. In other words, the habitual delinquent is a dead weight that the remainder of the class is forced to carry.

2. *Regular Attendance should become a Habit.* The aim in all measures looking toward the improvement of attendance is to make regularity and punctuality of attendance a habit with every pupil. It is not until this point has been reached that maximal economy of school administration from this point of view can be attained. Here as elsewhere, so long as the struggle between impulse and idea is a conscious struggle, waste must ensue. The following discussion, therefore, must consider the application of the law of habit-building to this problem. How can this important habit be initiated, and how may repetition be sustained until automatism results?

It will be recognized at the outset that there must be a certain irreducible minimum of absence and perhaps

also of tardiness in every school. Moreover, this irreducible minimum will vary with different grades, different localities, and different seasons of the year. Consequently an absolute standard cannot be adopted: one cannot lay down a hard-and-fast rule that ninety-four or ninety-seven per cent of the pupils enrolled should be present at school every session. The standard can, however, be established within certain limits. Probably all authorities would agree that a school showing an average attendance lower than ninety per cent of its enrollment would be greatly handicapped in doing effective work, and furthermore that such a condition should be remedied, and could be remedied if the proper methods were employed. All authorities would also probably agree that a school showing an average daily attendance of ninety-eight per cent of its pupils could do very effective work (other things equal), and furthermore that attempts to secure a higher per centum would involve a danger that must never be overlooked — namely, that some pupils would be forced to attend school when such attendance would be inimical to their health.[1]

3. *What constitutes a Necessary Delinquency?* Whether distinctly provided by statute or not, it should be definitely understood in every public school that the only acceptable

[1] In computing the per centum of attendance, the number enrolled should not, of course, include those who have been registered and then transferred to other schools. It is, however, unjust to consider the number "belonging" in place of the number enrolled, if, by the number belonging, one means all who have not been absent more than three or five consecutive days, as is done in most schools.

excuse for absence or tardiness is either the presence of some condition that would make attendance inimical to the pupil's health, or the existence in the pupil's home of a *very serious misfortune*. Absence from school or tardiness in coming to school caused by employing the pupil in services either at home or elsewhere should not be considered as legitimate. If the child's services are required either directly or indirectly to provide the necessities of life, the case is one demanding attention from the poor commissioners. If lack of proper clothing prevents regular attendance, the community should provide such clothing. All this is not charity; it is public economy. In view of the disturbing influence of absence and tardiness upon the work of the school as a whole, and in view of the heavy cost of maintaining a public school system, no other position is tenable. This does not mean that the school is to be the "juggernaut" so vividly described by opponents of compulsory education; it simply means that school work is to be recognized as a serious business, and that the time, energy, and wealth expended upon the school system are to make an adequate return; it simply means that the rights of the majority are not to be invaded and invalidated by the whims or the incompetency of the minority.

4. The habit of regular and punctual attendance must be initiated by establishing this principle. How can this be done?

(*a*) *Enforcing Attendance Statutes and Rulings.* Fortunately most of the states (except in the South) have forti-

fied education with laws that compel the attendance of all children of school age during the time that school is in session, unless they are excused for one of the two reasons mentioned above. Some of these laws, it is true, have been made practically ineffective through sharp manipulation, but the majority can be enforced. And yet, even where the legal conditions are ideal, the per centum of attendance is often deplorably low. The chief difficulty lies in the fear of the teacher to give offense to parents. Perhaps he is strenuous enough with pupils whose parents are not influential, but his laxity in other cases much more than counterbalances his partial rigorism. This attitude is not only unfortunate from the standpoint of school efficiency and economy; it is unprofessional, uncraftsmanlike, and inconsistent with the accepted standards of public service.

How should unnecessary delinquencies be treated in communities where a compulsory education law operates? Simply and solely as offenses against discipline and order in the school and against the public welfare in society at large. Persisted in, they should be looked upon as direct affronts to the authority of the school, and, in case the delinquency is due to the pupil and not the parent, the action should be construed as insubordination and treated accordingly. Written excuses should be demanded in all instances, and no written excuse should be accepted unless it is at least formally consistent with the provisions of the law.

To act professionally in matters of this sort does not mean that one should act tactlessly and blunderingly; it does mean,

however, that one should act firmly. A courteous note to the parent, informing him of the statutory requirement, and briefly explaining its justice, will often be effective. If it is not, a personal interview may remedy matters. If this measure fails, there are still left an appeal to the law and action through the regularly constituted legal channels. If local authorities refuse through pressure from interested parties to enforce the law, it is the plain duty of the teacher to lay the facts of the case before the state superintendent of public instruction. Though so drastic a policy should cost the teacher his position, the fact should not lessen his determination to be just.

5. (*b*) *Encouraging Regular Attendance by Prizes, Privileges, etc.* The "excuse" system, even under a rigid application of a compulsory attendance law, will render it impossible to eliminate all unnecessary delinquencies. As long as the parent's word is accepted without investigation (and American ideals of individual liberty properly preclude officious prying into one's private affairs), a certain amount of injustice will be involved in accepting written excuses. Compulsory education statutes can mitigate but they cannot entirely eradicate the evils of irregular attendance. Other methods of initiating the habits of regularity and punctuality must be employed, even under the most favorable conditions.

Material prizes for all who reach a certain standard in attendance are justifiable under exceptional conditions. They often fail, however, to reach the cases that are most troublesome. *Immaterial prizes* (certificates of perfect attendance, "honor" seats, names published in the local paper if attendance is perfect, etc.) are more to be preferred,

and are sometimes extremely effective. *Exemptions* from school duties (half holidays for those perfect in attendance for the month is a typical example) may be employed as a last resort, and especially in communities where there is no compulsory attendance law.[1] Where such a law exists, it is possible that such a practice would be declared illegal by the courts. It may be objected that these measures propose to give some sort of prize for attendance even when the law states that attendance is a duty and delinquency a misdemeanor. Nevertheless the difficulty of probing into every case of absence renders the law partially inoperative, and remedial measures are in such cases justified.

6. (*c*) *Competitions in Attendance and Punctuality.* In a large graded school, or in a city or county system of schools, it is often possible to create an effective *esprit de corps* with respect to absence and tardiness by instituting a competition for school honors in freedom from delinquencies. Some principals have reports of attendance sent to the office daily or weekly, and then compile a list of rooms in the order of excellence in attendance. A reward in the shape of a banner for the room showing the best attendance during the term may add zest to the competition, although

[1] The case is somewhat peculiar in the high school where compulsory laws do not commonly apply. Cf. the following: "The most valuable expedient for good attendance that I have found . . . is the exemption of those pupils perfect in attendance and punctuality for a specified period from the formal examinations covering that period." — H. M. HART: "How to Get and Keep Pupils in the High School," in *Inter-Mountain Educator*, 1906, vol. i, p. 170.

good results can be obtained without employing this device.

All attempts to secure good attendance (and especially the competitive device just mentioned) must be rigorously subjected to the qualifications that have been so frequently referred to in the foregoing discussions. There can be such a thing as attendance that is too nearly perfect. A shortsighted principal or teacher, in his enthusiasm for results in this regard, is apt to create a nervous tension among his pupils that will prevent even legitimate absence. This condition should not, of course, be permitted to exist. The difficulty lies in effecting a compromise between leniency and stringency. It is easy to overstep the limit on either side, and the teacher must be constantly on his guard against this tendency. There are no explicit directions that will avail in this matter. One must depend entirely upon one's judgment and good sense. But the danger must be constantly borne in mind.

7. *Tardiness.* The foregoing discussion has been devoted chiefly to the consideration of absence. The general principles brought out apply, however, to tardiness. Tardiness is, in some respects, a greater evil than absence, but it should never be made to appear so in the child's eyes, else he will be apt to remain out of school during the entire session if he chances to arrive a few minutes late. The habit of tardiness is worse than occasional absence because it is apt to be carried over into later life and to cause the individual no end of trouble in its eradication. The child should very early form the habit of meeting every engagement promptly, and there is no way to form this habit save by making tardiness a serious offense.

Aside from those delinquencies in punctuality that are due to conditions in the child's home, and which should be treated as similar delinquencies in attendance are treated, the greatest trouble arises from the "naturally" dilatory child. In young children this is often due to an inadequate "time sense" (more properly "time judgment"). This is usually a result of arrested development. The judgment of time intervals is not a native gift, but an acquisition, and the only way for the young child to acquire it is through the pleasure-pain economy. For the habitually tardy pupil there is probably no remedy so effective in stimulating time judgment as a judicious use of corporal punishment, provided, of course, that the tardiness is due entirely to the pupil's carelessness.

8. Habits of punctuality may be fortified and generalized by concrete instruction on their practical value in the social and business world. The time allotted to instruction in "morals and manners" or "ethics" (which is so commonly given to something else) might profitably be used in part for this purpose. This is a field in which a little "preaching" may perhaps be more than commonly effective, for the alert, competent, "hustling" business man is the popular hero of the day, and punctuality is one of his chief virtues. Anecdotes drawn from business life, backed up by rigorous insistence on punctuality in school life, will do much toward building up an active and effective ideal of punctuality among the pupils.

Interesting opening exercises, as stated in a former section, will help to curtail tardiness.

In some schools there are two bells at the beginning of every session, — a signal for forming lines and passing to the class-rooms, and a "tardy" bell. Where this plan is followed, technical tardiness (arrival after the tardy signal) can be almost entirely eliminated by treating rather seriously those pupils who fail to pass to their rooms with the lines. In general, the question of tardiness is least troublesome where there is a large school bell which rings five or ten minutes before the session is begun.

9. *Should Delinquencies in Attendance and Punctuality detract from Pupils' Standing in Scholarship?* This is a question that admits of argument. It cannot be doubted that absence from class exercises theoretically prevents a pupil from reaching the standard gained by his fellows who have been regular in attendance. Indeed, if an habitual absentee is just as well prepared for the work of the following grade as is a pupil who has been regular in attendance, the fact is an unfortunate commentary upon the character of the instruction and training afforded by the class work. Nevertheless it is true that the delinquent pupil may sometimes be just as capable of fulfilling the conditions of the higher grade as is the pupil who has been perfect in attendance. On the other hand, to count absence arbitrarily against scholarship standing is often extremely effective in impelling all pupils to regular attendance, and the temptation is strong to employ the incentive to its limit. While such a measure is justifiable in very obstinate cases, it could hardly be recommended for general practice. To retain a pupil for a second term in the same grade except for deficient scholarship is a very

severe penalty. It means practically the loss of a year or half-year of the child's life, and tends to discourage him from further effort.

REFERENCES. — Seeley: *A New School Management*, pp. 107–110; Kellogg: *School Management*, ch. vi; Tompkins: *Philosophy of School Management*, pp. 70–71.

CHAPTER VI

Preserving Hygienic Conditions in the Classroom

1. A school environment that is free from factors making for ill health is manifestly of prime importance in securing maximal efficiency in the operation of educative forces. Specialized investigation, undertaken especially in Germany, has made school hygiene one of the most complete and trustworthy departments of applied science, and every teacher should master the fundamental principles of school hygiene at least to the extent in which they are set forth in such text-books as those of Kotelmann [1] or Shaw.[2] The present chapter will indicate only those practical rules that the classroom teacher should have constantly in mind, laying particular emphasis upon the *hygienic habits* which it is the duty of every teacher to develop in his pupils.

2. *Hygienic Habits of Posture.* One of the very first tasks that a new teacher should set for himself is the initiation of proper habits of sitting. So much of the pupil's time is spent at his desk and during a period of development when bad postures easily become fixed into permanent malformations, that this matter is of the very greatest importance.

[1] L. Kotelmann: *School Hygiene*, English trans., Syracuse, 1899.
[2] E. R. Shaw: *School Hygiene*, New York, 1901.

Whatever the form of seat found in the classroom, it should fulfill three conditions: (*a*) it must permit an upright position of the body; (*b*) it must provide a support for the back; (*c*) it must permit the pupil's feet to rest squarely upon the floor. Adjustable seats should certainly be provided for growing children, but this matter is not often within the classroom teacher's control. Generally he must make the best of existing conditions. Practically all schoolroom seats fulfill the first two conditions, but the third is often a source of difficulty. If pupils are " hung up " (the technical term for the position in which their feet do not rest squarely upon the floor), the only recourse is to provide blocks of wood for them to rest their feet upon. This is not the best thing for the appearance of the classroom or for the temper of the janitor or sweepers, but it is absolutely essential to the welfare of the child.

3. Even in classrooms that are provided with adjustable seats, however, one frequently finds most unhygienic postures. The most common defect is the reclining position, where the pupil "slides down" in his seat until the body is entirely supported by the lower end of the spinal column (which rests on the front edge of the seat) and the back of the neck (which rests against the top of the seat back). The legs are stretched under the desk and the head is thrust forward. The evils of this position are obvious at a glance. The spinal column is curved outward, the shoulders are thrust forward, the chest is depressed, and proper breathing is prevented. In addition to these disastrous consequences, the appearance is in-

dicative of an inert, shiftless relaxation that is quite inconsistent with effective concentration of attention. Another common malposition is the forward inclination of the body, compressing the chest against the front edge of the desk.

The only safeguard against unhygienic posture is a careful demonstration of the correct position and a strenuous insistence upon this position until the pupils assume it at all times as a matter of habit. This does not mean that the pupil is to be permitted no freedom of movement, or that he is to be kept constantly in a rigid posture. Indeed, if the requirement is new to the pupils (as will frequently be the case), it will be wise to introduce frequent relaxation or "rest" periods during the first few days. It will take time to accustom the muscles to a fairly constant adjustment, but it can be done successfully if persisted in, just as the army recruit can be trained into soldierly form. In any case, variety should be secured by a change from one hygienic posture to another hygienic posture — not by a change from a bad posture to one that is worse.

4. *The Writing Posture.* This is an extremely important matter. If pupils sit "sidewise" at the desk while they are writing, one shoulder is almost always slightly higher than the other. A long continuance of such a posture will inevitably cause lateral curvature of the spine. It is for this reason that a system of penmanship is demanded that will render impossible the sidewise position, and among other virtues this has been one of the chief

characteristics to recommend vertical writing. If vertical writing is prescribed for the schools, every classroom teacher should see to it that the proper position is taken: feet flat on the floor, head well elevated, paper directly in front of the pupil, its front edge on a line *parallel to a line connecting the pupil's eyes*. Not to make this position a matter of unvarying habit is to repudiate the chief virtue of the system.

The reaction against the vertical writing has led to a compromise termed the "rational" or "medium" slant. The position for this writing is stated by some authorities to be the same as that for the vertical system. Other authorities, however, would permit a slight angle in the placing of the paper. The great defect in this recommendation is that no specific angle is recommended, consequently the child follows the line of least resistance, which is to assume the sidewise posture. In such cases the teacher should determine the angle that will permit the greatest ease in writing and at the same time will not allow the pupil to shift the body from a position directly in front of the desk. It would be a good plan to have a line painted diagonally across each desk indicating this angle, and to insist that the pupil keep the upper edge of his paper parallel to this line.

5. *Posture in Standing.* The erect posture should, of course, be made a matter of habit with all children during the formative period of growth. Careful insistence, fortified by "setting up" exercises such as are usually included

in every course of physical training prescribed for the schools, will reduce to a minimum the troubles that ensue from inadequate standing positions. The crying need here, as elsewhere in the elementary schools, is for teachers who have the strength, the patience, and the stamina necessary to carry habit-forming processes to a successful conclusion.

6. *Hygiene of Eyesight.* This subject should be worked up by each teacher from some authoritative text-book [1] on school hygiene or, better, from a special work on the hygiene of eyesight.[2] In the present connection the following points may be noted: (*a*) Books and papers containing reading matter in type of the average size should be held at a distance of about twelve inches from the eyes. If pupils find difficulty in reading type at this distance, they should be encouraged to consult an oculist. (*b*) The light should come exclusively from the left while the pupils are engaged in reading or writing at their desks. (*c*) "Hard" lead pencils should not be used for writing, because of the lack of contrast between the dull mark of the graphite and the background of the paper. Slates are unhygienic for the same reason. Slate blackboards are to be condemned unless a soft, white crayon is used. (*d*) Ink — dead black — should be used from the earliest possible moment. Many authorities introduce the use of ink in the second grade and discourage the use of pencils

[1] For example, Kotelmann or Shaw.

[2] For example, S. Snell: *Eyesight and School Life*, Bristol, 1895; J. H. Smith: *Defects of Vision and Hearing*, Chicago, 1902.

after that time.[1] (*e*) Glazed paper, blue white paper, and dead white paper are all inferior for hygienic reasons to yellow white, unglazed paper.

7. *Fatigue, Relaxation, and Exercise.* The subject of fatigue has already been referred to briefly in connection with the structure of the program. Happily the problem of fatigue in the sense of overwork is not a pressing problem just now in American education. Nevertheless it is wise constantly to bear in mind the factor of fatigue in reducing the efficiency of effort. Where sessions are upward of two and one half hours in duration, they should be broken by at least one recess of ten or fifteen minutes, given over to "free play" in the open air. The writer has known advocates of "no recesses" openly to defend their policy on the plea that it is difficult to control children in free play — especially to control the larger children in the upper grades. Such an argument requires no comment. As stated in a former section, formal gymnastics are not recreative in the manner commonly supposed. The only true recreation comes from entire relaxation or from spontaneous play. The play should always be supervised in large schools in order to prevent accidents. It is wise to provide by rule against certain dangerous games upon the school grounds. Some of these may, indeed, be good, healthful sports, but with three or four hundred

[1] In some schools first-grade pupils are permitted to write with ink as soon as their penmanship reaches a certain standard of excellence. This provides a stimulus for good writing, and at the same time promotes the interests of hygiene.

children of all ages playing together, they introduce an element of danger that it is folly to ignore.

Among the games that the writer has seen fit to prohibit in a large school are "crack the whip," "foot-and-a-half" (as distinguished from "Bombay"), baseball or other ball games using a hard ball, and Rugby football, except when limited to regular teams of the older pupils. Wrestling, boxing, and other rough sports should be permitted only when the pupils are properly clothed for the exercise, and when such activities do not degenerate into rough-and-tumble scrimmages. It is wise not to make a specific ruling covering all forbidden sports, but to curtail each as it crops out, stating the dangers involved, and ruling that the specific game or exercise shall not be indulged in during school hours.

Snowballing is a nuisance if indulged in promiscuously. The writer has found it advisable to prohibit it (and to enforce the prohibition by rigid penalties) both upon the school grounds and in passing to and from school. He has, however, permitted snowball battles where the school premises were large enough, curtailing the permission whenever it was abused.

Playing Marbles "for Keeps." Marble playing for stakes, or any other form of gambling, should be rigidly prohibited. When the marble season first opens, this rule should be definitely established. By passing among the groups of boys at the recess period or at noon intermission, a principal or teacher can soon learn whether the rule is observed. This precaution should be taken, no matter how thoroughly the teacher may believe in the virtue of his pupils. Needless to say, lapses from a rule of this character should be treated as most serious offenses.

Cigarette smoking, while hardly to be classed among games and sports, certainly deserves mention in connection with prohibited exercises. In view of the disastrous effects of nicotine upon young children, and especially because of its interference

with school work, all pupils who are known to indulge the habit *at any time* should be instantly reformed. If the offense occurs while the pupil is under control of the school authorities, severe penalties can be imposed without consulting with parents. If the offense occurs at other times, the parent should be notified at once and every effort made to secure the coöperation of the home in checking the evil. An habitual cigarette smoker will find it impossible to hide the evidences of his vice from a teacher who has normal acuity of smell. It should be remembered that the disastrous effects of smoking are most marked during the preadolescent period — prior, perhaps, to the fifteenth year.

8. *Personal Cleanliness.* The classroom teacher should insist rigorously upon personal cleanliness in his pupils. Almost every board of education rules explicitly that all pupils shall fulfill reasonable requirements in this respect, and where no ruling is explicitly made, it can certainly be assumed in the interests of common decency. Private admonitions to pupils are generally effective for this purpose. If something further is needed, a courteous request to the parent will usually bring results. For very obstinate cases there is no recourse save to the school lavatory. Some city systems now provide shower baths in the schools of the poorer districts.

The teacher can also do much to promote good habits of neatness and taste in matters of dress. The writer knows of one school where a tactful but aggressive campaign in this matter was rewarded by improvement throughout an entire community. Needless to say, the teacher's example is here an all-important factor, as is

also the appearance of the schoolroom and the school surroundings.

9. *Contagious Diseases.* Almost every community provides, through its health department, a set of regulations governing the duties of the teacher in dealing with contagious diseases; but occasional trouble is caused by the failure of the school authorities properly to coöperate with the health officials in this matter. Certainly the school, as representing enlightenment, should be the last to evade quarantine restrictions, even though the attendance record may be sadly disfigured. All children who have eruptions on the face or hands should be excluded from school until a physician certifies that no danger of infection is involved in attendance. Symptoms of whooping-cough should be watched carefully, and suspicious cases should be sent home to await a physician's diagnosis. Parents' pleas should not be permitted to have weight in such matters, no matter how eloquently they may be presented. All children from quarantined houses should be excluded from the school unless they are removed to other quarters, in which case they should be permitted to attend only after the period of incubation for the disease in question has elapsed.

A great many teachers permit the almost universal rulings with respect to vaccination to become "dead letters" until an epidemic arouses them to their duty. It is not too much to say that every epidemic of smallpox could be prevented if the school authorities were constantly vigilant in requiring the vaccination of all pupils.

With all the instruction upon the subject of physiology and hygiene in the elementary schools, there should certainly be some room for impressing the simple facts of pathology and the relation of microörganisms to disease. This is a matter of the first importance to public welfare. There are, indeed, many phases of the subject that only a trained mind can understand, but the simpler facts can be made clear to any child above the third grade.

10. *Moral Health.* Waste in the operation of school forces is often due as much to moral as to physical ill health. The mind that is absorbed in morbid interests is bound to profit in minimal degree by school instruction. What we term immoral tendencies are not infrequently "natural" tendencies; they have their root in instincts that are deeply seated and fundamental. The problem is to prevent an immature, ill-timed development of these instincts that will result only in perversion. Mental filth, like physical filth, grows upon itself: in the latter case, we term the germ that makes for degeneration a bacillus; in the former case, we call the degenerating germ "suggestion." The suggestion arouses the instinct into a premature and perverted functioning, just as the physical germ stimulates the chemical compounds of animal or vegetable tissues into premature decomposition.

The great danger in a large school is that these degenerating influences will find lodgment in the minds of the children at a time when the budding instincts provide a fertile field for their growth and rapid propagation. It is for this reason that recess periods should be carefully supervised, and that pupils should be encouraged to engage

in physical sports rather than permitted to congregate in groups where the gossip gleaned upon the streets and amidst questionable surroundings by a few pupils will contaminate the many. It is for this reason that a careful watch should be kept of outhouses, latrines, and closets. To eliminate and prevent the shameful conditions so often represented in these places by indecent writing and drawing requires the most watchful and persistent care. In districts where this particular form of vice has become embedded, it is often necessary to make hourly or half-hourly inspections of the toilets, tracing every misdemeanor to its source, and inflicting the most severe penalties. This is not a pleasant business to be concerned with, but it is a duty that no true craftsman will shirk.

REFERENCES. — M. V. O'Shea: *Dynamic Factors in Education*, chs. xv–xix; L. Kotelmann: *School Hygiene*, chs. ix–xiii; E. L. Thorndike: *The Principles of Teaching*, New York, 1906, ch. ii.

CHAPTER VII

Order and Discipline

1. The problem of discipline looks first to the welfare of the whole. The conditions that are most favorable for the concentration of attention by the entire class must be established and preserved, otherwise waste is involved which is cumulative in proportion to the size of the class or the number of pupils in the room. This requirement implies that each member of the class inhibit any impulse that may be inconsistent with these conditions; each member of the class must subordinate his own desires to the welfare of the class as a whole. This thesis is so simple and so closely parallel to the requirements that are demanded by all forms of civilized society that it is strange that one should think for a moment of denying the necessity for preserving discipline; and yet there have been, and still are, educational theorists who must needs becloud this simple proposition with a haze of sentiment that distorts the true perspective and involves in practice great waste and marked injustice.

There is but one way to avoid troubles of discipline, and that one way is to avoid all measures that make for good order, and resort to the *laissez-faire* doctrine that practically commits one to anarchy. When children come into the world free from every trace of primitive impulse, evincing none of the instincts that heredity impressed upon the race long before it became

human, with civilized habits bred in the bone, and with altruistic tendencies full-fledged — then the problem of discipline will have been eliminated from elementary education. But then, it must also be added, the need for education will have passed away and the teacher will be a luxury without a purpose.

2. *Authority the First Condition of Effective Discipline.* The first condition of effective discipline is respect for the authority of the teacher. If this respect be sufficiently strong, the whole problem clears up and the solution is comparatively simple. To permit children to grow up in a constant attitude of disrespect for authority is to commit the gravest of pedagogical crimes. Legitimate responsibility must always be equalized by legitimate authority; authority must always be checked by responsibility. The law endows the teacher with sufficient authority to enforce every requirement for which he is legally and morally responsible. The vital question is how to assert this authority effectually over one's pupils. The following discussion will indicate some of the salient characteristics of the teacher that are absolutely essential to this end.

(*a*) *Courage.* Absolute fearlessness is the first essential for the teacher on whom rests the responsibility for governing an elementary or secondary school. This fearlessness is not alone or chiefly the expression of physical courage, although this must not be lacking.[1] It is rather an

[1] In the training of wild animals, loss of "nerve" is fatal to the trainer's success. The same condition holds in the training of children who at certain stages of their development are, as President Hall points out, "the wildest of all wild animals." In either case, to show the slightest sign of fear is to surrender.

expression of moral courage; daring the sometimes certain interference of parents, officious trustees, and others of like character; standing firm in one's convictions even though the community may not approve. And, after all, it is this sort of courage that is the rarest and, at the same time, the most essential. One must brave unpopularity. One must not hesitate, if necessary, to make enemies, to incur the dislike — temporarily, at least — of one's pupils. Happily this is a condition that is not often to be met, neither should it be permanent in any particular case, and yet it is from just such crises as this that the true craftsman will not shrink. The standards of his craft should be far more precious to him than popularity either with children or with parents. The world is wide, and the community that wishes to bring up its children in lawlessness and disrespect for authority is presumably at liberty to follow its whims; but the schools of such a community should be rigidly boycotted by all members of the teaching guild who respect themselves and hold in some measure of veneration the ideals of their craft.

3. (*b*) *Tact.* The efficient exercise of authority must always involve that intangible quality known as tact. The teacher who blunders every delicate situation of discipline that he meets will fail, whatever degree of courage he may possess. One should not understand by tact a willingness to surrender a single increment of the authority that belongs to one. But, after all, it is the result that is important — the fact, not the form. If the teacher can preserve his authority without vaunting it upon all

occasions, his path of life will run smoothly. Order and respect for his authority are the salient points. If these are secured, it matters little what people think, so long, of course, as their opinion has no injurious influence upon his work. In other words, there is no reason for a display of authority simply to emphasize the fact of authority. Those who exercise the greatest power in the world are the very people who keep the fact from impinging continually upon their neighbors' consciousness. The stamping, storming, blustering teacher or principal is one who lacks tact. The teacher who "fires up" before the occasion demands, declaring that he will have order or "kill somebody," is simply inviting serious trouble. The tactful teacher never blusters, never brags, never storms — but when occasion demands he acts, and acts swiftly, unerringly, effectively, without "fuss," without fear of the consequences.

4. (*c*) *Persistence.* In creating a condition of order in the classroom, it is essential that every rule laid down be adhered to rigidly, unremittingly. The acme of good discipline is reached when the conditions of order are preserved automatically, without thought or judgment on the pupils' part. In other words, a classroom that is well disciplined has the conditions of good order reduced to habit. But the law of habit-building operates here with unrelenting certainty. To make the conditions of order automatic, every slightest exception must immediately be noted and corrected. At first, some allowance should be made for forgetfulness on the part of the pupils;

that is, an exception to an established rule should be corrected by brief admonition. But this must not be permitted to continue. "I didn't think" cannot be condoned more than once. It is the business of education to train pupils to "think" about the matters that require thought; and pupils who habitually forget to obey rules should have their memory stimulated by something more effective than an admonition. The teacher who must constantly warn pupils and correct them for the same misdeeds over and over again is not an efficient disciplinarian.

The vital import of this principle cannot be too strongly emphasized. It is a byword that more teachers fail through inability to "discipline" successfully than through any other one cause. And failure to discipline is most commonly due to lack of persistence. The teacher lays down a rule. The pupils break it once or twice to test the teacher, or perhaps they break it through forgetfulness. The experienced teacher gives the pupil the benefit of the doubt in such cases once and once only. But the young and inexperienced teacher keeps on with admonitions which become increasingly ineffective the longer they are employed; or, what is far worse, he neglects to note a lapse from the established rule. That insidious Rip-Van-Winkleism, "This time will not count," is the rock upon which many a teacher's prospects are wrecked.

"What shall I do?" the young teacher will surely ask in this connection; "What shall I do when I have tried every device that I can think of, and still fail?" There is no explicit formula that will cover each specific case, but one general suggestion may be given: *Get order.* Drop everything else, if necessary, until order is secured. Stretch your authority to the breaking point if you can do nothing else. Pile penalty upon penalty for misdemeanors, and let the "sting" of each

penalty be double that of its predecessor. Tire out the recalcitrants if you can gain your end in no other way. Remember that your success in your life work depends upon your success in this one feature of that work more thoroughly than it depends upon anything else. You have the law back of you, you have intelligent public sentiment back of you. Or, if the law be slow and halting, and public sentiment other than intelligent, you have on your side right, justice, and the accumulated experience of generations of teachers.

5. (*d*) *Scholarship.* Those who have constantly to deal with children well know how hard it is to deceive them. Pupils may not detect weaknesses in the teacher's knowledge of which he himself is unaware, but they will unerringly detect any attempt to hide ignorance or to "bluff." A teacher whose scholarship is sound and secure, who knows his subject-matter, and who has the ability to present his knowledge in a form that children can comprehend will, other things equal, have less trouble with discipline than a teacher whose knowledge is uncertain or inaccurate, and especially one who is aware of his deficiencies and attempts to hide them. A frank confession of ignorance is far better than an attempt to gloss over inadequate knowledge; but this confession must not come too often, and should certainly be offset by innumerable instances of enlightenment. The teacher should never lose sight of the fact that his prime duty is to *teach*, — to transmit to the child experience in one form or another, — and that his chief stock in trade is experience or knowledge. The teacher who is deficient in this respect may maintain his authority by force, but the maintenance of authority

by this means alone will be of but little service. It is only as the child comes to respect authority spontaneously — only as he comes to recognize the work done in school as worth while — that subservience to authority will become a desirable factor in his education.

6. (*e*) *Justice.* "Be just and fear not," is an excellent motto for a teacher who wishes to preserve the conditions of discipline and good order. Children, like adults, will respect what they believe to be justice, and like adults they will resent injustice. Sometimes it is difficult, if not impossible to convince children of the justice of a disciplinary measure, but generally they will recognize that a demand or a request is "fair" if it really possesses this characteristic. The spirit of "fair play," — the "square deal" of which we hear so much in these days, — makes a strong appeal to the very pupils who are most frequently troublesome from the standpoint of discipline.

An essential corollary of this principle of justice is a thoroughgoing impartiality in administering disciplinary measures. If there is such a thing as justice, it applies with equal force to the rich and the poor, the influential and the uninfluential. The public school should be the most democratic institution in the community, — and it must be said in its favor that it usually is. Only occasionally is the social "snob" to be found among the rank and file of the teaching guild.

7. (*f*) *Good Nature.* One of the worst enemies of good order is an ill-tempered teacher. All the innate evil in children seems to be brought out and intensified under the influence of a sour, morose, unlikable disposition. On

the other hand, there are some teachers who can command respect by the very fact of their genial, sunny dispositions. Doubtless these extremes depend upon conditions over which the individual has little control — some people inherit ill-favored dispositions, just as others inherit sunshine and laughter. But every teacher can control the conditions of good temper in some measure. First of all comes the matter of health, and first in this category, sufficient sleep. Even the best temper will be ruffled at the slightest provocation if the normal amount of sleep is long denied its possessor. A good digestion is too obviously connected with a good disposition to require emphasis at this point, except to say that a good digestion can often be acquired by appropriate measures, even if heredity has seemingly decreed otherwise. Sufficient food and whatever outdoor exercise the individual may need are likewise conditioning factors.

By far the most important factor in this respect, however, is freedom from worry. To escape the pitfall of "borrowing trouble" is one of the most difficult lessons for the beginning teacher to learn. The cares of the classroom are not light, even under the most favorable conditions. Some pupils will progress so slowly that their advance is not to be detected. Some will remain out of school for trivial reasons, and so delay the progress of the class. Some will torment the teacher with ingenious but soul-trying mischief. And, as if these were not enough, principals and supervisors and superintendents will subject one to carping criticism, and patrons will threaten to

deprive one of one's position unless certain ridiculous demands are acceded to. To "keep sweet" amidst a combination of all of these disturbing influences is a stupendous task. It is simple enough to say that it should be done: how to do it is another quite different matter.

For all of these vexations and worries there is, in the writer's opinion, no balm so soothing and so generally effective as the sympathy of an older and more experienced teacher. The cultivation of outside interests will help, perhaps; and certainly no teacher should be without some recreative activity that is more or less alien to his daily work. But outside interests, if employed to offset the trials of the classroom, will tend to take too much energy and attention to themselves. In their nature they will be more attractive than school problems, and the teacher is apt to say to himself, "If I cannot succeed in teaching, I can at least do well at music, or at writing, or in business pursuits." On the other hand, sympathetic intercourse with fellow-workers will constantly emphasize the craft spirit, — the most priceless possession of the teacher, and the possession that he is most likely to lose in the earlier stages of his career. His effort should be to keep the craft spirit alive at all hazards. He should constantly look upon his work as professional service, and upon himself as an initiate into the privileges of that service. The free association of kindred minds will do more to keep this craft spirit alive than anything else. Any form of social service must be dreary, discouraging work if the tasks that it imposes are not attacked with enthusiasm. In many cities one may find little coteries of teachers that gather together at stated intervals for the purpose (not always avowed) of cultivating the craft spirit, of keeping alive enthusiasm in the work. From these meetings the pessimist, the malcontent, the teacher ashamed of his calling, and the teacher who works with his

eyes upon the clock and his mind upon pay day, are all rigidly excluded. No better lot can befall the beginning teacher than to become identified with one of these guilds — for guilds they are, although not always consciously. There he will find the comfort that really cheers, the advice that really helps, the idealism that really inspires. And there, too, he will receive his due share both of the praise that will not puff him up, and of the blame that will not cast him down. But above all, he will learn from this intercourse that the trials and troubles are not his alone, that many of them are intrinsic in the very nature of his calling, and that the safest and sanest policy is to look upon them as problems of the day's work — problems to be studied in sober reflection, and solved with dispassionate judgment.

8. *Other Factors involved in Securing Order.* Respect for the teacher, however, is not the sole condition of order in the classroom. Many classrooms in which the pupils would not dare to break a rule or infringe wittingly upon the rights of others are characterized by a confusion that makes good work practically impossible. The difficulty here is not lack of effective authority, but rather lack of skill in exercising authority.

(*a*) *The Teacher's Voice.* Probably superintendents and principals would generally agree that, next to inability to secure respectful obedience from pupils, most of the trouble in discipline has its source in the voice of the teacher. The temptation to speak to children in a high-pitched, rasping voice is very hard to resist, especially when there is the least bit of noise or confusion in the classroom. As the teacher's voice becomes louder and louder, the tumult increases in like proportions, until finally one must shout

in order to be heard. To one who tries, for the first time, the remedial measure of a low voice in such a situation, the result is little less than astounding. As the teacher lowers his voice, the hubbub gradually dies away, and almost before one is conscious of the change, quiet and order have succeeded confusion and chaos. Each pupil is on the alert to catch every word, and, through an imitative impulse, almost immediately lowers his own voice and modulates its accents to fit in with the new scheme. The remedy is so simple that one could hardly be pardoned for mentioning it here, were it not so frequently overlooked even by teachers who are otherwise highly efficient.

9. (*b*) *Mechanized Routine.* This matter has been discussed in detail in an earlier chapter [1] and needs notice here simply as a factor in good order. Haphazard methods of forming lines, passing materials, etc., not only waste time in themselves, but also produce noise and confusion that interfere with good work. Many a school in which disorder prevails could be almost instantly reformed by a few simple regulations governing routine.

10. (*c*) *Keeping Pupils Occupied.* This is one of those blanket provisions that one meets so frequently in treatises upon the subject of school management. Every one knows that children who are kept occupied in some educative activity occasion a minimum of trouble from the standpoint of discipline. The chief difficulty lies in the "How," not in the "What," and this question is for educational method and not classroom management to answer. After all, there

[1] See below, ch. iii.

are in every school enough tasks to be done. The difficulty lies in the fact that some pupils would rather do almost anything else than the tasks that are imposed. The problem, therefore, is reduced to that which will claim our attention in the following chapters. Incentives must be supplied which will lead the pupil to put forth effort toward the attainment of the ends that he should seek. Work should, indeed, be made interesting and worth while, but it is not to be inferred from this that the teacher should strain every effort to provide "entertaining" tasks for his pupils. The very excellent doctrine of interest has been far too frequently interpreted to mean a doctrine of entertainment. The pupil should assuredly be kept occupied. Assuredly also he should, in course of time, become interested in this activity. But neither of these requirements is or should be inconsistent with the functioning in the pupil's mind of a strong and effective ideal of duty. If the teacher possesses sufficient authority and can assert this successfully, ideals of duty can be cultivated with a minimum of trouble. Even under this condition there will still be plenty of room left for applying the legitimate doctrine of interest.

11. (*d*) *Substitution* versus *Repression.* The dictum, "Keep pupils busy," finds a much more practical and dignified expression in what may be termed the "doctrine of substitution."[1] This doctrine would prevent the expression of undesirable impulses by substituting some

[1] Cf. E. L. Thorndike: *Principles of Teaching*, New York, 1906, pp. 22 f.; J. A. H. Keith: *Elementary Education*, pp. 124 f.

other form of activity rather than by requiring an absolute inhibition of all movement. Thus the introduction of manual training is justified, from one point of view, because of the fact that it provides objective work demanding an exercise of various muscles; the surplus energy finds an outlet, and does not express itself in undesirable ways. The alternation of form and content subjects in the daily program also provides opportunity for an application of the doctrine of substitution. The tendency to do away with recess periods is to be condemned, among other reasons, because it eliminates an opportunity for applying this principle.

12. (*e*) *Individual Treatment.* The treatment of conditions of disorder *must deal with the individual as such and not with the group.* It is the individual who is trespassing upon the rights of the group; the class as a whole has already suffered from his misconduct. And it goes without saying that individual peculiarities should be considered in whatever treatment is decided upon.

REFERENCES. — Seeley: *A New School Management*, ch. vi; Dutton: *School Management*, ch. vii; Kellogg: *School Management*, ch. vii; Tompkins: *Philosophy of School Management*, pp. 157–183; Thorndike: *Principles of Teaching*, ch. iii; O'Shea: *Dynamic Factors in Education*, ch. i.

E. Mor.

CHAPTER VIII

Penalties

1. Under the conditions of imperfection through which humanity must struggle, every form of government that aims to secure law and order must employ penalties for offenses against established rules. It must be remembered that not every individual needs to be subjected to a penalty in order to insure the inhibition of his unsocial impulses. The infliction of the penalty is always the last resort, reserved for those cases in which all other means fail. The welfare of society must be preserved at any cost to the individual, but it is the fundamental principle of government that the welfare of society should not cost the individual any more in the way of pain or inhibition or repression than is absolutely necessary. The same principle applies with equal force to the government of the school. The welfare of the mass is a consideration against which the claims of no single individual can have preponderant weight. The individual must, if necessary, be sacrificed to the mass; but this sacrifice must not be made unless the necessity is clear, nor in any greater degree than the necessity demands.

2. What is to be understood by a well-ordered classroom? Nothing more nor less than this: a room from

which all unnecessary distractions due to lack of control on the part of individual pupils have been eradicated. The concentration of attention on the part of individual pupils is best accomplished under conditions that are free (1) from intermittent sound stimuli; (2) from olfactory stimuli, either pleasant or unpleasant; (3) from visual stimuli caused by erratic and intermittent movements. The necessity of some form of government or discipline arises from the fact that especially the first and last of these distracting influences are very easily occasioned by lack of inhibition on the part of individual pupils.

The point that needs emphasis is this: *inhibition is an acquired art*, not a primitive instinct. The instincts are all, practically, in the direction of movement; repression of the impulse to move must be learned through experience. The basic principle that underlies this development is best expressed in the "pleasure-pain" hypothesis; whenever an instinctive movement results in pain, it tends thereafter to be repressed; whenever it results in pleasure, it tends thereafter to be repeated.

3. *Spencer's Doctrine of Natural Punishments.* This fundamental biological principle lies at the basis of the most thoroughgoing theory of discipline that has yet been elaborated — Herbert Spencer's doctrine of "natural punishments." [1] It will be necessary at this point to consider this theory in some detail, not only because it is, like everything that this great master brought forth, thoroughly

[1] H. Spencer: *Education*, New York, 1895 (Appleton's edition), pp. 161 ff.

worth serious study, but also because it has had a profound effect upon educational practice.

Spencer argues from the biological postulate that the function of pain is to act as a deterrent with reference to experiences that are injurious to the organism. Harmful adjustments, he assumes, always issue in pain; beneficial adjustments in pleasure. In moral conduct, this biological principle becomes the criterion for "right" and "wrong": "That conduct whose total moral results, immediate and remote, are beneficial, is good conduct; while conduct whose total results, immediate and remote, are injurious, is bad conduct." [1] Thus the happiness or the misery that results as the inevitable consequence of any act becomes the reward or the punishment of that act. To subject a child to a "natural" punishment, therefore, is simply to stand out of the way and let him reap the natural consequences of his act.

Spencer maintains that a natural punishment has the following advantages over an artificial punishment: (1) It is unavoidable and inevitable.[2] (2) It is proportionate to the degree of offense — "to the degree in which the organic laws have been transgressed." "A slight accident brings a slight pain, a more serious one, a greater pain." (3) It is "constant, direct, unhesitating, and not to be escaped." "No threats, but a silent, rigorous performance. If the child runs a pin into its finger, pain follows. If it does it again, there is again the same result, and so on perpetually.

[1] Spencer, *op. cit.*, p. 173.

[2] *Ibid.*, p. 175. (All following citations are from the same section.)

In all its dealings with surrounding inorganic nature it finds this unswerving persistence, which listens to no excuse, and from which there is no appeal; and very soon recognizing this stern though beneficent discipline it becomes extremely careful not to transgress." (4) Natural punishments "hold throughout life." "It is by the experimentally gained knowledge of the natural consequences that men and women are checked when they go wrong."

It will be readily seen that on the surface this theory has much to commend it to the educational practitioner. If a pupil fails through idleness to prepare his tasks during school hours, he is "kept in" after school to make up his deficiencies. If he is unduly disorderly at recess time, he is deprived of his recess. If he abuses the privileges of the school, he is suspended or expelled. All these punishments Spencer would term "natural"; although, in a strict interpretation of his theory, the natural consequences of failure to perform the tasks required by education would be the evils attending lack of knowledge and training, and this punishment would not, of course, come to its full fruition short of the maturity of the pupil. This is the weak point in the practical application of Spencer's theory; his illustrations do not always illustrate the point that he is trying to make. Taking them at their face value, however, it will be noted that the punishments instanced, whether natural or artificial, are among those most generally condemned by experienced teachers. "Keeping in" after school, depriving a pupil of recesses, and suspension

and expulsion, are all looked upon as akin to bad practice. And primarily for a very simple reason — namely, that they are generally ineffective.

4. The difficulty with Spencer's theory is not, however, confined to the inapt illustrations that he uses. His fundamental hypothesis in so far as it pertains to human action is inadequate, as will appear from the following analysis:—

(*a*) The natural consequences of an act are frequently too far removed both in time and in space from the act itself to permit in the agent's mind that firm association which is essential if the pain is to become a deterrent. Especially is this true with immature children, whose span of attention is narrow, and who cannot think back from painful consequences through a multitude of intermediate experiences to the act that gave rise to the consequences. Adults not infrequently fail to make the connection between effect and cause unless the one follows directly upon the other; the ignorant and superstitious will invariably ascribe pains and penalties to bad luck, supernatural forces, insidious enemies, fate — anything rather than their own misdeeds or lack of foresight. The doctrine of natural punishments becomes, therefore, impracticable in all cases where the consequences are separated from the act by a long period of time.

(*b*) Again the painful consequences of a given act may be inflicted, not upon the agent, but upon others, perhaps in the distant future long after the agent himself has gone to his reward. How such a condition can be a deter-

ring factor in the adjustment of the agent is hard to see.

(*c*) It is not clear that natural punishments are always "proportionate to the degree in which the organic laws have been transgressed." "Nature" does not make distinctions so fine as this. It works by the law of averages, and if, *in the long run*, an action is injurious, it is rendered, through the slow process of natural selection, either painful or fatal. But so long as the race as a whole is perpetuated, nature (speaking metaphorically, of course) is satisfied. Natural selection is crude in its operations. Whatever it permits to survive is not, for that reason alone, perfect. It is useful only, perhaps, in the bare majority of cases; in a large minority of cases, it may, indeed, be fatal.

(*d*) Nor is the brute instinct of pleasure and pain a valid and indisputable guide to conduct *under the conditions of social life*. The main reason, biologically, for the existence of mind and intellect is the very inadequacy of instinct. As man comes more and more under the control of civilized conditions, many of the things that once meant danger to the organism no longer mean danger, although they still have the primitive mark of danger attached to them — they still cause pain. On the other hand, some of the things that were once good for the organism living under primitive conditions are no longer good for the organism living under social conditions; but they still have the primitive sign of the beneficial attached to them — they are still "pleasant." Through experience, man

comes to learn this. In other words, he comes to understand that present pains and discomforts may be essential to the full fruition of a desired end. The ability to make this judgment is the distinctive feature of human intelligence as opposed to brute instinct.

5. Nevertheless, Spencer's theory may be held as basic in this regard: the first steps in self-control are taken at the behest of *immediate* consequences, be these either pleasant or painful. Until mind can look into the future and govern adjustment with reference to remote ends, the primitive pleasure-pain economy will and must be the only guide. Civilization imposes requirements the true value of which cannot be comprehended in the narrow span of the primitive mind. To wait until *natural* consequences shall correct misdemeanors is impossible under these conditions. In fact, some misdemeanors may, if left to themselves, bring pleasant immediate consequences that will greatly multiply the chances that similar misdeeds will follow. Obviously the only recourse is to introduce artificial punishments that will associate so vividly with the misdeeds as to prevent the recurrence of the latter. It is the duty of adult intelligence to do this. The very essence of the helplessness and dependence of infancy and immaturity is to insure the government of the child's action more or less completely through adult precept and direction.

6. In individual instruction, where the needs of but one person require consideration, the practice of having all delinquencies made up in kind (keeping after hours for

idleness, depriving the pupil of a privilege in case of its abuse, etc.) may be effective. This, however, as has been indicated above, is not true of class management. In dealing with children in masses, disciplinary measures are undertaken primarily *to promote the welfare of the whole.* Whatever penalties are inflicted, therefore, must be measured by this standard. The individual must not be forgotten, but the welfare of no single individual can, in equity, be counted against the welfare of the class. Where the so-called natural punishments (keeping after school, etc.) are employed in class management, they often fail to have a deterring effect upon other pupils, and they fail very frequently to reach the offender himself. The distraction that the offense brought about is repeated again and again, so long as the pleasant consequences of the offense overbalance the unpleasant consequences — and one needs only to refer to one's own school days to recall that being "kept after school," or losing a recess, was a very light penalty to pay for certain forbidden pleasures. In short, the end of discipline in such cases is not gained. The body of the class suffers from the misdemeanors of the individual, and the penalty fails to bring justice to the majority.

7. This guiding principle indicates that individual misdeeds which prevent the economical operation of classroom influences for the welfare of the majority of the pupils must be eliminated *at any cost.* Any measure which will effect this end with the least possible injury to the penalized pupil must be looked upon as legitimate. The great and

vital question is this: Is the measure effective in fulfilling the aim of discipline — namely, the preservation of those conditions that are essential to the welfare of the majority? Once this question is answered, a second question may be raised: What effect does this measure have upon the penalized pupil, and could equal efficiency be secured by a measure involving less injury? In short, the whole process is one of compromise.

This does not argue for a return to the blind, rule-of-the-rod discipline of the early schools. The old-time policy defeated its own purposes just as thoroughly, just as completely, as does its ultra-modern antithesis. But the tendency of civilization in corrective measures is toward leniency only in so far as lenient measures are more effective than harsh measures. Intelligent leniency is often the high-water mark of moral strength; blind and emotional leniency is just as frequently to be identified with moral weakness. And this is quite as true of the justice's court as it is of the classroom. The community that is cursed with hoodlumism usually supports a "weak-kneed" administrator of the law, and the school that is cursed with constant and unrelieved disorder is commonly presided over by a weak-kneed principal. The combination of a soft heart and a soft head is fatal to efficiency in either office.

8. *The Fundamental Principles.* From the preceding discussion it is clear that the efficiency of a penalty in securing the repression of undesirable activities will depend upon three factors: (1) the degree of pain, discomfort, or disagreeableness which the penalty involves; a penalty from which the "sting" has been carefully extracted has lost thereby its chief virtue as a

penalty; (2) the closeness with which it is associated with the *undesirable* impulse; a penalty that is not associated explicitly and directly with an undesirable act may, by chance, become associated with a desirable response: thus if the pain of chastisement, for example, is associated with school life in general instead of with some forbidden activity, school will become distasteful and will be avoided whenever possible; (3) its freedom from painful consequences in excess of those needed to inhibit the undesirable impulse; a penalty that is not sufficiently severe is unjust to the mass; a penalty which is unnecessarily severe is unjust to the individual; a penalty which is effective in a given instance and yet which lingers and rankles in the pupil's mind may, in the last analysis, work more injury than good.

9. *Corporal Punishment as a Penalty.* From the standpoint of theory, corporal punishment probably best fulfills the conditions named above as a penalty for application in the elementary school. (1) In the first place, the "sting" is generally present and, except under abnormal conditions, disagreeable enough to deter the offender from a repetition of the act. (2) Corporal punishment can be inflicted in close sequence upon the forbidden act and so insure the association that is so essential. (3) Corporal punishment does not, as a rule, leave a pain that persists and rankles, as do some other forms of punishment usually looked upon as more humane; for example, "scoldings."

On the other hand, corporal punishment sometimes fails of these virtues. (1) Some pupils probably become hard-

ened to chastisement, and thus the penalty comes effectually to lose its "sting"; again, abnormal individuals may be quite anæsthetic — practically insensitive to pain stimuli; again, the fact of corporal punishment may be given a high value among pupils as a hero-making process; consequently the pleasure of adulation will overtop the physical pain of chastisement, and thus the "sting" will, in effect, be eliminated. (2) Corporal punishment may be so long delayed as not to be associated with the forbidden act; it may be administered so frequently that the association is lost to view; even if administered in close sequence to the act, the association may not be definitely forced home by the teacher. (3) Corporal punishment may have injurious after-effects that are out of proportion to the seriousness of the penalized offense; for example, if the pupil thinks himself to be punished unjustly, the physical pain may be replaced by a mental pain that lingers and rankles.

10. If corporal punishment is applied, therefore, it must always be with a distinct recognition of its limitations and dangers. The points noted above may be embodied in three sets of rules or cautions: (1) Do not employ corporal punishment if its sting has been extracted, either actually or effectually. Do not apply corporal punishment to "hardened" cases; these can generally be more effectively influenced by some other means. If youthful recalcitrants court corporal punishment because it gives them prestige with their fellow-pupils, either increase the intensity of the stimulus so that it will overtop the pleasure of adulation,

or, in case this is impracticable, resort to expulsion or suspension; it may be assumed, however, that the latter measure will be needed only in very exceptional cases; at any rate, it is well to keep on with the punishment until there is no doubt of its inefficacy.

(2) The application of corporal punishment should become less and less frequent as the teacher's authority becomes more and more adequately recognized. Where it is necessary to use the rod day after day and year after year on the same pupils, a possible agency for good has been transformed into an unquestioned agency for evil. It is treatment like this that hardens boys into fit recruits for the criminal classes. Nevertheless this should not be interpreted to mean that a recalcitrant should be chastised once and once only. The first application is sometimes looked upon by the pupil only as a test. He may accept it graciously and still persist in the undesired act. It may take several applications firmly to associate the act with an unpleasant consequence. But in course of time the pupil will come to understand that the teacher must be obeyed. This conviction may later be transformed into a "tradition" that is effective with succeeding classes. The writer knows of several cases where a teacher or a principal entering a new school has established his authority at the outset by means of severe disciplinary measures, and where such measures have become so essential a part of the traditions of his room or his school that the necessity for their repetition has never arisen after the first year of service. The pupils are certain in their own minds that

unpleasant consequences will follow an infraction of the rules, and the tradition of these consequences (perhaps even magnified in the course of time) comes to operate, vicariously as it were, for the actual penalties.

(3) If corporal punishment is applied, the teacher should always be certain that the pupil either recognizes its justice or will come to recognize its justice. The best guide in this matter is for the teacher to be certain that the penalty is just. Whenever misdemeanors occur, the responsibility for which cannot be accurately placed, it is unwise to administer corporal punishment to any pupil or pupils on the mere chance that he or they may be guilty. In short, circumstantial evidence should never justify corporal punishment. It is the writer's experience that this is the only safe policy, although now and then a guilty pupil may escape the penalty. If the pupils gain the idea that the teacher is absolutely just and fair, the chances are that unidentifiable guilt will be reduced to a minimum.

11. *Summary.* Corporal punishment is at best only a tentative measure, designed to teach the child the initial lessons of decency and order. It is an extremely effective agency for fulfilling this function if it is used temperately and with good sense. Its possibilities of evil are incalculable if it is used in any other way.

12. *The Reaction against Corporal Punishment.* So many evils have sprung from the abuse of the rod in the past that the prevailing tendency of the present time is to abolish it entirely from the educative process. This is

an extreme reaction, and the pendulum will doubtless soon come to swing back toward a position of equilibrium, as it does in the case of all extreme movements in education. Nevertheless, the reaction is at present so pronounced that one who deliberately recommends corporal punishment as a school penalty cannot overlook the arguments against it. These may be briefly summarized as follows: —

(*a*) The progress of the race is away from the brutal and toward the human — conjecturally, at least, toward that highest ideal of humanity that is termed "divine." Corporal punishment appeals to the brute instincts, consequently it is inconsistent with the general trend of progress. It is largely for this reason that it has been abolished as a civil penalty.

This argument overlooks a very important fact. Although the progress of the race is away from the brute, the individual who is born into the world is, biologically, no farther away from the brute than was the infant who was born at the very dawn of human progress. That is, everything that makes man human is a product not of heredity but of culture and training — education in the broadest sense of the term. No matter how far civilization may develop, civilized society must always take the child at the brute level and raise him to the social level. Human progress is extremely rapid; but biological progress — and this is the only kind that will have any effect upon heredity — is extremely slow. This is one of the most profound truths that modern science has revealed, and it is a truth that the great mass of mankind, who have no knowledge of biology, find it hard indeed to appreciate. Everything else is advancing, they say; why should the principles of early education remain stationary? And yet they must remain practically stationary so long as the race remains what it is physically. There is as yet no evidence that the culture

and virtue accumulated by each generation are transmitted to its offspring through the forces of heredity.

That corporal punishment has been abolished as a civil penalty does not necessarily argue its inadequacy as a school penalty. The criminal may be so hardened to pain — or so abnormally anæsthetic — that blows would have no effect upon him. But even beyond this, the cases are entirely different. In the one case, we are dealing with a child who has no experience to draw upon, who cannot project himself into the future and see the remote consequences of his acts. In the other case, we are dealing with an adult who, presumably, has reached the age of reason.

(*b*) Corporal punishment antagonizes the child, placing him in an attitude of habitual opposition to authority.

This is true in a very small proportion of cases, and these are probably, in the main, cases that represent an abuse of the measure. If all corporal punishment had this disastrous effect, ninety-nine per cent of the men and women of to-day would be enrolled among the anarchists. (The figure, of course, is only conjectural, but it would be surprising if more than one per cent of the adult population of the land failed to taste either the slipper, the shingle, or the birch during their childhood.)

(*c*) Corporal punishment leads the child to hate and despise the parents and teachers who inflict it.

And yet adults not infrequently have the greatest respect and love for the parents and the teachers who corrected them in their youth. Children will resent an unjust punishment, and this resentment will probably linger for a long time — even into adulthood. This is not a reason, however, for abandoning the rod of correction. It is rather an indication of the care that must be exercised in not permitting a child to be punished unjustly. He may not always see the justice of his chastisement, but the likelihood is that he will see it later if justice has

really been done him. It is in cases of flagrant injustice that resentment brings evil results.

(*d*) It is cowardly for an adult to "take a stick and attack a defenseless child."

This is hardly deserving of a place among serious arguments. In the first place, it is decidedly distasteful for the great majority of men and women to administer corporal punishment. In the average of cases, one may safely assume that it takes courage rather than cowardice to resort to this measure. In the second place, the indictment would easily cover all cases where authority is armed with the power of execution. If it is cowardly for the teacher to wield the rod, it is cowardly for the policeman to carry a "billy," for the judge to pass sentence on a prisoner (surely the prisoner is defenseless in the same sense that the child is), and for the jail warden to keep his keys in his own possession instead of distributing them among his prisoners, in order that they may have an "equal chance."

(*e*) Corporal punishment and other harsh measures of discipline tend to discourage pupils with school life and lead them to take the first opportunity to seek remunerative employment.

This is the most serious indictment against every measure that tends to make school work in any way irksome. Examinations have been condemned for the same reason; also the formal drills that are necessary to lay the automatic foundations of life. School work must be made pleasant, interesting, agreeable, otherwise education will fail to reach the individuals who need it the most.[1]

[1] It would be difficult to conjecture the practical results of this argument. In every school system there is a desire on the part of the authorities to "show numbers." The man who can build up a large school is the successful man in education. How he attracts his pupils is a matter of little importance as long as he gets them. The motive may not be consciously formulated, but it is frequently present, whether one is conscious of it or not. Again there are well-meaning but shortsighted indi-

This argument has little force against a temperate use of corporal punishment in the elementary school. The great majority of pupils on whom corporal punishment is inflicted remain in school, and it would be hard to prove that those who leave do so for the reason ascribed. Beyond this, nearly every state has a compulsory education law that operates in the elementary school. Under an effective enforcement of such a law the condition mentioned could not, of course, exist.

(*f*) Corporal punishment tends to brutalize the individual who inflicts it.

This is an argument of some force, suggesting a condition that may easily come to operate. That corporal punishment *necessarily* brutalizes is certainly disproved by innumerable cases of schoolmen (and schoolwomen) who have employed the measure and are still within the pale of humanity. But the danger is one to be borne in mind and counteracted in all possible ways. It is quite analogous to the danger that confronts all who deal largely with immature minds, — the tendency, namely, to become dogmatic and unyielding through too wide an exercise of autocratic authority.

viduals who believe that the privileges of the school should be extended as widely as possible, but who fail to discriminate between a large attendance and effective work. Certainly if good work can be accomplished without drill, examinations, or the imposing of penalties for disorder, let us abolish all these things. No one would perpetuate a disagreeable thing if its function could be fulfilled in any other way. To "let down the bars" is imperative unless there is good and valid reason for keeping them up. Is there this reason? Ask a high school principal whose pupils have been "kindergartened" up through the grades what he thinks of eliminating the drills in the elementary school, — or ask a business man whose apprentices have come from a high school where "soft" pedagogy has prevailed. The progress of a class is always measured by the ability of its slowest members, and it makes little difference in the end whether these slow members are naturally stupid or whether they are simply indolent from want of a proper incentive for effort.

(*g*) Corporal punishment is ineffective in securing the ends which it seeks. To quote a contemporary authority: "The rod never did produce good results in any case, unless there was character in the teacher who used it. This character in the teacher properly used would have produced better results in every case without the rod. Every experienced superintendent knows many cases in which men and women who used corporal punishment have ignominiously failed, and whose classes have been restored to good order and kindled to a spirit of enthusiasm for working by a little woman who did not practice coercion in any form." [1]

The supposititious cases cited could, of course, be easily offset by innumerable instances in which a teacher who failed through lack of firmness in asserting his authority has been succeeded by another teacher who has brought a decadent school "up with a sharp turn" by a judicious use of the rod.[2] For every superintendent who could adduce one instance of the former sort there are doubtless ten who could bring up as many instances of the latter variety. Until an accurate investigation is made upon the matter, one statement is precisely as good as another. For example, take the following testimony by the principal of a large grammar school in Buffalo: "While I believe that the time of frequent use of the rod of punishment as a warning to others has passed, I firmly believe that, notwithstanding the great progress made in the management of our educational affairs, there has not yet been found an adequate substitute for a good strap to bring a real bad boy to his senses." [3]

13. Practically all authorities upon school management admit the efficiency of corporal punishment, but would

[1] J. L. Hughes, in *Journal of Education* (Boston), vol. lxiii, pp. 485 f.

[2] Cf. the case cited by White: *School Management*, pp. 208 f.

[3] J. L. Bothwell: "How to dispose of the Incorrigible Boy," in *Proceedings of the New York State Teachers' Association*, 1905, p. 104.

restrict its application to a very narrow sphere. White recommends its use only in cases of rebellion, meaning by that term a positive refusal on the part of the child to accede to the request of the teacher. Dutton [2] admits that "theoretically there are extreme cases where it (corporal punishment) is needed for the good of the offender," but he implies that teachers cannot be generally trusted to use the measure temperately and effectively, and that the school boards that have abolished it "have chosen the lesser of two evils." Roark [3] agrees that corporal punishment should be used but rarely, but insists that "no teacher can afford to let it be understood that whipping is abolished." Kellogg [4] indorses "bodily chastisement" as a last resort. Tompkins [5] believes it to be justified with pupils "whose integument is the only avenue to the mainspring of conduct." Seeley [6] also indorses a temperate use of the rod as far preferable to many other penalties commonly employed. Baldwin [7] summarizes his discussion of corporal punishment in the maxim, "Grant the right, but avoid the use." Landon's position [8] is equally explicit: "Moral offenses of a grave character, deliberate and continued neglect of admonition or rebellion, may be

[1] E. E. White: *School Management*, New York, 1893, pp. 207 f.
[2] S. T. Dutton: *School Management*, New York, 1904, p. 104.
[3] R. N. Roark: *Economy in Education*, New York, 1905, p. 45.
[4] A. M. Kellogg: *School Management*, New York, 1884, p. 69.
[5] Arnold Tompkins: *Philosophy of School Management*, Boston, 1898, p. 173.
[6] L. Seeley: *A New School Management*, New York, 1903, pp. 97 ff.
[7] J. Baldwin: *Art of School Management*, New York, 1887, p. 176.
[8] J. Landon: *School Management*, Boston, 1884, pp. 352 f.

justly treated by corporal punishment; and it is sometimes necessary to give a physical check of this kind, as a counterpoise to wrong propensities or long-established habits, as a means of arousing the pupil from that dreamy irresolution which is frequently the greatest obstacle to reformation." The last-named authority also has this to say with regard to the supposed evil effects of the practice: "Those persons who have most carefully watched its effects will probably concur that, where used with skill and discretion by a sympathetic teacher, and where care is taken to neutralize its side tendencies by other good influences, there is little or no cause to fear any evil results. There is something radically wrong besides the mere *use* of corporal punishment wherever the long train of evils laid to its charge are ever realized in practice." Keith[1] indorses corporal punishment as a last resort, asserting that it is better for the child that "he should suffer the pain of corporal punishment and even the disgrace of being whipped in the presence of his peers than that he should persist in acts of selfishness and meanness."

Conspicuous among the recent writers upon this subject is Dr. J. S. Taylor, assistant superintendent of the New York City schools. Dr. Taylor[2] anathematizes corporal punishment as a "relic of barbarism," and asserts with italicized vehemence that a principal "who cannot discipline a school without corporal punishment, could not

[1] J. A. H. Keith: *Elementary Education*, Chicago, 1905, p. 288.

[2] J. S. Taylor: *Art of Class Management and Discipline*, New York, 1903, pp. 62 ff.

successfully do so with corporal punishment." His discussion is extremely suggestive, but he is obviously in a decided minority among authorities upon the subject. It should be said, however, that he writes chiefly for the teachers in a large city system, where the prestige of a vast organization is very much in evidence, and where authority is backed up by truant officers and parental schools. Nevertheless, even under these conditions, it is interesting to note that the Male Principals' Association of Manhattan Borough received a report [1] from a representative committee, recommending corporal punishment in extreme cases, and basing this recommendation upon some very sane and cogent arguments.

"Dr. G. Stanley Hall, in his article on 'Moral Education and Will Training,' cites from Richter the record of a Swabian schoolmaster, named Haberle, as an example of the severity which once prevailed in Germany in the matter of punishment — truly a remarkable count for 51 years and 7 months as a teacher: '911,527 blows with a cane; 124,010 with a rod; 20,989 with a ruler; 136,715 with the hand; 10,295 over the mouth; 7905 boxes on the ears; 1,115,800 snaps on the head; 22,763 *nota benes* with Bible, catechism, hymn book, and grammar; 777 times boys had to kneel on peas; 613 times on triangular blocks of wood; 5001 had to carry a timber mare, and 1701 hold the rod high — the last two being punishments of his own invention. Of the blows with the cane, 800,000 were for Latin vowels, and 76,000 of those with the rod for Bible verses and hymns. He used a scolding vocabulary of over 3000 terms, of which one third were of his own invention.'

"Against this punitory maximum, Dr. Hall, the gist of whose

[1] These resolutions will be found in Taylor, *op. cit.*, pp. 71 ff.

article is 'that only in so far as the primitive will of the child is wrong by nature are drastic reconstructions of any sort needed,' everything depending on how 'aboriginal our goodness is,' and upon 'that better purity established by our mother in our heart before the superfetation of precept is possible,' ranges 'the now too common habit of coquetting for the child's favor, and tickling its ego with praises and prizes, and pedagogic pettifogging for its good will, and sentimental fear of a judicious slap to rouse a spoiled child with no will to break, to make it keep step with the rest in conduct, instead of delaying a whole schoolroom to apply a subtle psychology of motive.'" [1]

14. *Regulation of Corporal Punishment.* The reaction against corporal punishment, although doubtless carried too far, has accomplished one very desirable end: it has shown the necessity for curtailing the practice and for regulating it by sane restrictions. In practically all schools corporal punishment is much less prevalent than it was two decades ago, and, wherever it is inflicted, it is almost universally under strict prescription by explicit rulings as to the nature of the offense that can be met with this measure, the time and method of administration, and the agent who inflicts it. The following summary is given as representing a fair consensus of typical rules in force in a number of city systems.

(*a*) There should be a "standard" method of inflicting corporal punishment. Blows upon the head, in the neighborhood of the spinal column, or near any vital organ should be rigidly prohibited.[2] Just what cutaneous

[1] Cited by A. F. Chamberlain: *The Child*, London, 1900, pp. 388 f.

[2] "Shaking a child, striking him upon the head, slapping his face, boxing his ears, and similar means of inflicting physical pain are strictly

area can be most effectively stimulated is a matter of differing opinion, as is also the particular instrument to be used. Many good teachers advise "spanking" for young children, and there is much to recommend this traditional means of discipline. Upon those who have grown callous to the palm of the hand, a shingle may be profitably employed, although it should be noted that some authorities object to any blows upon the buttocks as unhygienic — maintaining that they tend to cause congestion of the capillaries in the neighborhood of the genital organs, thereby giving rise to serious dangers. St. Louis[1] prescribes that corporal punishment "shall not be inflicted otherwise than by using a thin rattan upon the fleshy part of the back." La Crosse, Wis.,[2] rules that corporal punishment "shall be restricted to the use of a leather strap, preferably on the palm of the hand." A light "switch" (such as the birch of our grandfathers) applied around the legs is sometimes effective. Unyielding rods should not be used in any case, and it is always well to avoid anything that will leave a "welt," which, although it may look far more dangerous than it really is, is apt to cause troublesome investigations.

prohibited, and the Board will hold its teachers strictly responsible for any violation of this rule." — St. Louis Public Schools: *Abstract from Rules and Regulations*, Reg. 7, Sec. ii.

"Striking the children on the mouth, on the ear, or on the head is strictly prohibited." — Chester, Pa.: *Manual of the Public Schools*, 1904–1905, p. 61.

[1] *Op. cit.*, p. 24.

[2] La Crosse, Wis.: *Course of Study and Rules and Regulations*, 1898, p. 81.

15. (*b*) In a graded school it is customary for the principal to inflict all necessary corporal punishment. This is essentially a man's duty, except, perhaps, with children in the primary grades. Most rulings upon this matter prescribe either that the principal shall inflict the punishment in the presence of the classroom teacher or the teacher in the presence of the principal. In almost every case the principal's sanction is necessary before the teacher can inflict corporal punishment.

The following citations will sufficiently indicate the prevailing practice in this regard: —

"Teachers are charged under the principal with entire control and discipline of their pupils and are held responsible for their conduct; but must not inflict corporal punishment except after consultation with and by permission of the principal." [1]

"Teachers shall use kind and persuasive measures with their pupils, and should this fail, they shall report the case to the principal, who may inflict, or cause to be inflicted, such corporal punishment as he may think the case demands; but no teacher or principal shall in any case, or under any pretense, punish children in the schools by striking or slapping on or about the head, or on the hand, or by shaking them violently. Corporal punishment shall not in any case be administered in the presence of the school, but in the presence of the principal or superintendent, or one or more teachers." [2]

"Where corporal punishment is necessary, it must be administered by the teacher under the direction and supervision

[1] *Course of Study and Rules and Regulations,* Public Schools of Duval County, Fla. (Jacksonville), 1902, p. 57.

[2] Fort Worth, Tex., Public Schools: *Manual,* 1904–1905, p. 15.

of the principal of the school, or, where this is impossible, in the presence of another teacher." [1]

"The authority to inflict corporal punishment is given to every teacher, but such punishment shall be inflicted only in the presence and with the sanction of the principal. Each teacher shall file with the superintendent, at the close of each month, a list of all cases of corporal punishment inflicted by said teacher during the month, giving date, name of pupil, and cause and extent of punishment." [2]

16. (*c*) In view of the natural tendency of the child's mind to exaggerate or, at least, to distort actual occurrences, it is well always to have an adult witness when punishment is inflicted. This is sometimes impracticable; indeed, the fact that such punishment should be associated very closely with the act that occasioned it would frequently make the delay in securing witnesses inimical to the efficiency of the penalty. But in all cases from which outside interference is anticipated, witnesses should be secured. In such cases, also, every precaution should be taken to eliminate any conditions that might unjustly be turned against the teacher. For example, if a brittle rod is broken during the act of punishment, the very statement, "The teacher broke a stick over the child," has an ugly sound, and will surely tell against one in popular opinion, if not even in a court of law, although the blow itself may be quite innocuous.[3]

[1] Chester, Pa.: *Manual of the Public Schools*, 1904–1905, p. 61.

[2] Bay City, Mich.: *Manual of Public Schools*, 1904, p. 203.

[3] For a digest of regulations in the larger cities, see *Report of Commissioner of Education*, 1900, pp. 2578 ff.

17. (*d*) Most of the citations also prescribe that punishment shall not be inflicted in the presence of other children. This is doubtless a wise provision, although it may be urged on the other side that an occasional punishment inflicted before the class will have a preventive influence among other pupils. The benefits of such a practice must be balanced up against its disadvantages. An exhibition of the brute strength that a teacher can if necessary command may strike fear into the hearts of the witnesses, but it may also arouse a spirit of antagonism that will encourage others to court the penalty for sake of the accompanying martyrdom. In general, the practice is to be condemned on the same grounds that public executions are condemned; namely, because, in both cases, morbid interests are aroused that tend to brutalize the onlookers.

18. (*e*) The general principles of child development would indicate that corporal punishment has its chief sphere during the formative period of the child's life (eight to twelve); but this rule, while holding in the main, is subject to some exceptions. Occasionally an adolescent is benefited by the application of the rod, but experience in the classroom testifies that most cases of unfortunate results from corporal punishment originate in the punishment of those who have passed puberty. It must be remembered that corporal punishment is an extreme measure to be resorted to only when a reasonable trial of more gentle methods fails in effect. It is generally agreed that "moral suasion" is not often effective with pupils in the formative stage of growth, but that it is very frequently

effective with adolescents. It appeals solely to the "reason" and to the sentiments founded upon rather advanced judgment-products. If the pupil can be led to see *why* his misdemeanors cannot be permitted to continue, he will, if he is an average child, desist from their practice. It is at this point that corporal punishment or any form of extreme penalty becomes useless, and its application beyond this point, while often practiced for the sake of "form," or for making an "example," should certainly not be countenanced. When an adolescent lacks adolescent characteristics, however, — when he fails to respond to reason, — corporal punishment is not only justified but demanded for the protection of the majority.

19. *Other Penalties.* (*a*) *Rebukes.* Before resorting to corporal punishment the efficiency of other less strenuous penalties should in every case be tested. Lapses from order should first be met with severe (although not necessarily harsh) verbal reproval. This should be accompanied by a fair warning that further lapses must result in a severer penalty. The great majority of children will respond effectively to a rebuke; it is only the small minority that need anything more drastic. When a penalty has been promised, it should in every case be inflicted if the occasion arises. One of the worst habits in school mismanagement is to tell a pupil that he must accept a certain punishment for a misdemeanor and then "back down" from inflicting that punishment. A "suspended sentence" may sometimes be employed, but it is dangerous for the young teacher to practice this too often.

20. (*b*) *Loss of Privileges.* To deprive a pupil of a privilege is a legitimate and often effective penalty for offenses against discipline. It is for this reason that the monitorial system described in a former chapter is to be recommended, especially for those communities where corporal punishment is forbidden either by statute, by board ruling, or by public opinion. Deprivation of a privilege is, however, often ineffective because the privilege is not prized by the pupil. Keeping "after school" and "keeping in" at recess soon lose their sting, and are further to be condemned as disciplinary measures on account of the extra service which they require of the teacher. No single pupil should be led to think that his misdemeanors will entitle him to a greater amount of attention from the teacher than the average well-behaved child can command. It is for this reason that disciplinary penalties should always be swift, certain, and as little wasteful of time as is possible under the conditions.

21. (*c*) *Suspensions.* To suspend a pupil from school in order to secure the coöperation of his parents in his government is not to be looked upon as good practice except under abnormal conditions. School officers have legal authority over the child while he is within the school premises. They are paid to exercise this authority, not to evade the responsibility that it imposes. They are *in loco parentis*, and, legally, the parents themselves have no more power during this time than the teacher. If the former have more influence with the recalcitrant, the fault lies with the teacher, and the duty of government should not

for this reason be placed upon the parents' shoulders. Moreover, the pupils who are most difficult to govern in school are usually those from whose homes the least help could be obtained.

Occasionally a parent demands that all cases of discipline with reference to his children be referred to him before being acted upon by the school authorities. The writer has, once or twice, been informed that, if a child is to be punished, the parents withhold the right to inflict the penalty. He acceded willingly enough to this request on the first occasion, but the results were so disastrous to the discipline of the school that he has made it a rule since that time tactfully but firmly to insist upon parents' recognition of his legal status, unless, indeed, the parent is willing to inflict the punishment in his presence. He has explained that the teacher is always responsible to the law for the abuse of his power and that an injured party may, if he wishes, seek redress through the courts. He has also explained that such interference by the parent with the duties that rightfully belong to the teacher cannot fail to place the teacher in an unjust light in the eyes of his pupils and of the community at large.

Far more disastrous, however, than the interference of parents is the officious meddling of boardsmen and others who may happen to have "influence." In such cases, there is but one alternative open to the true craftsman: either such interference must cease or he must resign *instantly*. It would be a bright day for the calling of schoolcraft if all teachers could come to an absolute agreement upon this point. One who for a moment truckles to political influence in school work does incalculable harm to the cause of education. If craft ideals and standards are needed anywhere, it is surely at this point. There must be some things that a teacher will not do, no matter what the temptation, — no matter, even, if one's bread and

butter depend entirely upon doing them. The physician would starve rather than be unfaithful to certain standards of his profession. He might gain wealth by such infidelity, but he would lose something that is far dearer to him than any amount of wealth; namely, professional standing. The same is true, although in lesser degree, of the lawyer. The members of these professions make their own standards, set up their own ideals. The general public very wisely keeps its hands off. This is the condition that should prevail in schoolcraft, and, until it does prevail, the work of education will never rank with other human callings requiring a like training of their novitiates.

22. (*d*) *Expulsions.* To expel a pupil from school is the very last resort in cases of discipline. With even the worst offenders there is less danger to society in keeping them at school than in permitting them to run at large. Where parental schools are maintained for the reception of such cases, there are occasions when the ordinary public school may wisely turn over to this special institution the cases that are relatively incorrigible by normal methods. But where parental schools are not provided, certainly no pupil not positively degenerate should be turned out into the street. This, of course, does not apply to older pupils who have passed the legal school age. Such individuals may be presumed to have attained a maturity that will render disciplinary measures unnecessary, and, if they fail to accommodate themselves to the requirements of the school, it is an injustice to the others to retain them.

23. (*e*) *Sending Pupils to the Principal.* A large proportion of the classroom teachers in the city systems serve

under supervising principals. This condition should make discipline rather simpler than where the classroom teacher is independent. The principal is usually a man, while the classroom teacher is almost invariably a woman. The natural division of labor would seem to indicate that the heavier tasks of discipline should devolve upon the male official, and many principals are chivalrous enough to take this view of the matter. They will support the classroom teacher with all the muscular force and all the influence emanating from higher authority that each individual case demands. If the pupils respect the principal, they will dislike being sent to him for offenses against order, and in this simple measure the teacher can often solve the most troublesome problems. Not all principals will shoulder this responsibility, however. Some believe that it weakens the classroom teacher. Others are only too glad to leave the "heavy work" to the women. In any case, a teacher's reputation and standing will be lowered if the practice is indulged too frequently. The young teacher who tries this remedy several times and finds it ineffective may safely come to the conclusion that other measures are demanded.

The most reliable source of data concerning punishment of school children must always be the experience of the teachers who are in closest touch with the problems of discipline. The following propositions are taken from a report[1] which represents a consensus of the experience of about one hundred successful teachers in Rhode Island.

[1] "Report on Syllabus concerning School Punishment and Penalties," *29th Annual Report*, State Board of Education, Rhode Island, 1899.

(1) The classroom teacher should administer punishment for classroom offenses.

(2) Little time should elapse between the misdemeanor and the punishment.

(3) Children should not be punished in the presence of other children.

(4) Children should not be punished by one who is laboring under the emotion of anger.

(5) Intentional, willful, and premeditated offenses should be punished.

(6) Repeated offenses should be punished.

(7) Offenses not apt to be repeated should not be punished.

(8) Not all children require the same punishment for the same offense.

(9) Children should always clearly understand why they are punished.

(10) Punishments tend to reform the pupil if he sees their justice.

(11) Suspension should be the last resort.

(12) Punishment should not be used for the sake of "making an example."

(13) Sarcasm, ridicule, and satire should not be used as punishments.

(14) The majority of parents who are consulted favor corporal punishment.

(15) Tasks should not be employed as punishments.

REFERENCES. — Tompkins.: *Philosophy of School Management*, pp. 170–181; J. S. Taylor: *Class Management and Discipline*, ch. v; Kellogg: *School Management*, ch. viii; Seeley: *School Management*, ch. viii; J. A. H. Keith: *Elementary Education*, Chicago, 1905, pp. 119–133, 288.

PART II

JUDGMENT FACTORS IN CLASSROOM MANAGEMENT

CHAPTER IX

The Problem of Attention

1. It has been attempted in the preceding chapters to indicate the various points at which an application of the law of habit-building may serve to prevent waste in the educative process as applied to children dealt with in the mass. In a well-organized classroom the matters already mentioned will take care of themselves; and the first aim of the classroom teacher should be to reduce to the plane of routine or group-habit all of the necessary details that can profitably be cared for in this way. The problems of management, however, do not end with this reduction of detail to automatic routine. Even in the classroom that is best organized the teacher must constantly meet new questions that arise with regard to the main problem of our discussion. The effective treatment of pupils in the mass must, in other words, always involve judgment; it can never be reduced entirely to the machine basis.

The problem of Part II, therefore, is to consider the general principles, standards, or ideals that should govern the teacher in the non-routine phases of his work. As in

Part I, the question is still, at basis, a question of economy. How can class work be made to return the largest possible dividend on a practicable investment of time, energy, and money?

2. Beyond doubt the greatest source of waste in the work of education results from the difficulty encountered in securing and holding the attention of all pupils to the subject-matter of instruction. The problem is complex and difficult, and its solution involves the balancing of a multitude of diverse factors. Simply to *secure* attention, simply to *hold* attention — if these were the only factors, the situation would be somewhat simplified. But here, perhaps, more than anywhere else, the methods that are employed to insure economy in school work must be subjected to the rigorous test of the ultimate end of education, for they involve the operation of educative forces that are as fundamental as the subject-matter of instruction itself.

3. The first step in the solution of this problem is to inquire of the psychologist what laws govern attention. Every one knows that some things are easily attended to, and that other things are attended to with great difficulty. Every one also knows that the things attended to with difficulty are often the things that are most essential for one to attend to. These are facts of common knowledge.

Psychology attempts to go further than this — it tries to classify the things that attract attention easily and to find out just why they do so. It tries also to classify the things that are difficult to attend to, and to discover the reason for this difficulty. Various bases have been adopted

for these classifications, and not all psychologists are yet agreed as to the best basis. The following discussion will adopt what may be called the biological point of view as offering the most satisfactory explanation of the phenomena of attention as applied in schoolroom practice.

4. *The Doctrine of Ends.* From the biological point of view it is clear that attention must bear some direct relation to the *needs* of the organism. We attend to certain things primarily because they are, in one fashion or another, essential to our well-being. We are not always conscious of these needs; one, for instance, may attend to a flash of light, or to a sharp pain, or to a moving object, for no conscious reason save that the stimulus, as we say, "catches the attention." But why are we so constituted that we attend to these things? The real reason must be sought in race history. When our ancestors lived under very primitive conditions, as they did for thousands of generations, it was absolutely essential to the existence of the organism that it be able to note any marked disturbance in its environment. Survival under primitive conditions was conditioned absolutely upon the instinctive tendencies to attend to all stimuli that could, in any marked degree, become danger signals.

All of our *instincts*, then, — all of those complex adjustments with which nature has provided us, — become correlates, on the mental or conscious side, of what may be termed *tendencies to attend* — tendencies to hold consciousness open and receptive to whatever impressions may fit in with the instinct. Thus, the instinctive need to note

the presence of moving objects in the environment is correlated with a law of attention: movement anywhere within the range of the field of vision will "draw the eyes" in that direction — will attract our notice. When the cravings of hunger affect us, anything that will satisfy these cravings attracts our attention. Our minds are, as it were, keyed or attuned to these various sorts of stimuli by the tension of the instinct that is functioning at the time.

It will be noted that attention in all these cases is determined by an *immediate* end, and that this end is the satisfaction of the organic need which is instinctively felt. Action based upon attention of this sort does not look into the future, it takes no account of any remote consequences. Furthermore its expression is, so far as the individual is concerned, purely selfish. It may, it is true, have social or altruistic implications, as in the case of the mothering instinct, but in so far as the direct reaction upon the individual is concerned, it satisfies an immediate, organic, innate, instinctive need.

It is clearly evident that this law of attention can be applied effectively to improving the application of pupils to the tasks that are set for their accomplishment. If an instinctive need can be appealed to, the result will be sure and certain. This may be called the "First Law," or the "Law of Primary Passive Attention," and its operation will be treated in detail in a later section.

5. *The Second Law.* The operation of the first law is quite independent of any conscious end or purpose save

the immediate satisfaction of an instinctive or organic need. It is distinctively the law of the lower types of mind. No animal below the rank of man ever rises very far above its operation. It is the essential prerogative of the human mind, however, to "look ahead," to project itself into the future, to construct in imagination an idea of what this future will bring forth or demand, and then to adapt its adjustments to the end thus previewed. The fundamental importance of this capacity to human development can never be overestimated. It stands as the prime factor in human evolution. It is the significant characteristic of *Homo sapiens*, for thinking — reasoning — is nothing more nor less than this constructive activity of the human mind.

What does this mean in terms of attention? Simply this, that whenever attention is determined by an end that is consciously beyond the needs of the moment, — whenever present desires and impulses are inhibited or suppressed for the sake of some remote end to be gained, — a struggle is inevitable between the thing that one desires to attend to and the thing that one knows one should attend to. It is clear that, in general, the nearer the end, the more likelihood that it will conquer the momentary impulse. It is also clear that, the more vivid the image of the end to be reached, the more likelihood that the momentary impulse will be defeated. Likewise, the more highly the end is tinged with desire or positive emotional force, again the greater likelihood that it will be victorious in its struggles. All of these principles are simple corol-

laries of the general law; they are practically axiomatic; and yet it is safe to say that no principles so fundamental as these have been so woefully neglected in educational practice.

Because of this struggle between the impulse of the moment and the idea of a remote end that may be gained by suppressing this impulse, this variety of attention is known as "active," and the principle governing its operation may be conveniently referred to as the "Second Law" of attention.

One or two concrete instances will suggest to the reader a number of personal experiences that will tend to bear out the above statements. The effort essential to "get down" to work, unless forced by some immediate need or impelled through the operation of habit (which, however, involves an element yet to be discussed), is typical of the struggle between the end and the impulse. Impulse always makes for variety and abhors monotony, but monotony is often necessary to reach some remote end. One is ambitious, for example, to become a musician. The start is made valiantly enough, the bright picture of future honors and adulation being sufficient to keep one to the routine and discipline of the preparatory process for some little time. Sooner or later, however, the monotony becomes irksome, and the intense desire to have done with it all and be off "on another tack" is apt to take complete possession of one's mind. In case the triumph is complete, — as it is in the sad majority of cases, — the change is made, the discipline lapses by degrees, and is finally abandoned altogether, and the ambition that once burnt so brightly dies away. Hence arises the necessity in all branches of education to present as an incentive to effort, not only one remote end, but all sorts of inter-

mediate ends, the approach and attainment of which shall keep the worker at his task until finally the daily discipline of toil becomes a matter of habit, and the remote end is constantly approached without undue struggle, and perhaps drops entirely out of consciousness.

In the work of the schoolroom, the principle finds application in a multitude of devices, some of which will be discussed in a later section. The grading and promoting system may serve as an illustration in the present connection. The remote end of education is far too distant and abstract a conception for even fairly mature students to grasp, much less little children in the early stages of the process. For this reason a series of ends, less remote, must be introduced, and this gives rise to the grading system with its attendant examinations and promotions. Each step in the attainment of the remote end is terminated by some sort of test as to the character of the work done during the step, and this test will act, under the proper conditions, as an incentive to effort in the pupils. At the outset the steps are short, for the end cannot be too remote, else it will lose its effectiveness as an incentive. As the pupil develops, the end is placed at a point farther and farther away, until, in the graduate courses of the university, a period of three years may lapse before the student is subjected to an examination.

6. *The Third Law.* In the preceding discussion it has been assumed that the kind of attention termed "active" always operates against some impulse or instinctive tendency. If such is the case, what shall we call that form of attention that is given freely and without effort to an activity that makes for a remote end and still does not "fit in" with an instinctive tendency? It is obvious enough that one comes to enjoy one's work; that one finds no

difficulty whatsoever in following a line of activity that makes unerringly for an end that one has previewed. The explanation is to be found in an extension of the law of habit. We become habituated in course of time to almost anything that we persevere in, no matter how disagreeable that thing may have been at the outset. That is, the inhibition of distracting impulses becomes a habit, becomes unconscious. This sort of attention is termed "secondary passive," and the principle that governs its operation may be called the "Third Law" of attention.

This must not be construed as meaning that attention becomes a habit. Strictly speaking, there is no such thing as a "habit of attention." Habit and attention are the two extremes of mental life. One may, however, habitually assume the *attitude* of attention, and one may habitually repress impulses that are inconsistent with attention, or habitually resist temptations which distract. It is only in this sense that a "habit of attention" means anything whatsoever.

This secondary passive attention might be called the *terminus ad quem* of the teacher's work. When the pupil has reached this stage, all that he needs is direction and suggestion. Prior to this time his effort must be incited by one form of stimulus or another; after this time, his effort is given freely: all that now needs to be done is to see to it that this effort is expended profitably and economically. The successful teacher is he who can get his pupils into this stage most effectively. The ideal school (which can probably never be realized in practice) is one in which every pupil works for the joy that the working brings him.

Needless to say, the problem that pedagogy is concerned with lies not so much in the operation of the third law as in the operation of the first and second laws. The effort of educational theory is to find some means of applying the first and second laws in such a fashion that the conditions demanded for the successful operation of the third law may be fulfilled. Too many treatises on teaching start with secondary passive attention. They assume that the effort of the pupils will be given freely in any desired direction. This is a simple case of begging the question.

Most authorities upon pedagogy and school management, for example, speak of interest in one's work as an incentive to effort; but interest in work for its own sake is not at all akin to an interest that attaches to a remote end, toward the attainment of which the work or effort is but a means. The very common advice given as a sort of blanket precept to insure success in teaching — "Make the work interesting" — is about as futile and ineffective as the dictum discussed above, — "Keep the pupils busy." Every teacher knows that the thing to do is to make the work interesting; the point where advice is needed is not what to do, but how to do it. There are many tasks involved in education that are not intrinsically interesting. Sometimes, however, after effort has been initiated and sustained by means of a powerful incentive, the task gradually becomes fascinating in itself. The incentive may now very well be forgotten, for its utility is at an end.

7. It will be necessary in the present discussion to leave the treatment of the third law at this point, and to devote our time and energy to the first two laws. These will

accordingly be treated in some detail in the two following chapters. It should always be borne in mind, however, — even if not always explicitly stated, — that the third law must come to operate if the school is to accomplish its work with a minimum of waste.

REFERENCES. — J. R. Angell: *Psychology*, New York, 1906, pp. 64–76; E. B. Titchener: *Primer of Psychology*, New York, 1899, ch. v; H. H. Horne: *The Psychological Principles of Education*, New York, 1906, ch. xxviii; W. C. Bagley: *The Educative Process*, ch. vi.

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CHAPTER X

The Problem of Attention (Continued): The Operation of the First Law

1. The first law represents the activity of attention at its lowest level of development. Primary passive attention is determined solely by instinct. If any end is consciously in view, it is simply the immediate gratification of an instinctive desire. The problem of the present chapter, therefore, is to inquire into the operation of those instincts that can be utilized in schoolroom practice to secure attention of the passive order.

2. (*a*) *The Instinctive Desire for Change and Variety.* This is the most general expression of the first law. The desire for change and variety is instinctive in all human beings irrespective of age or degree of culture. Other instincts may be outgrown entirely or so greatly subdued that the accompanying desires never become a source of trouble, but this fundamental instinct seems too deeply planted ever completely to be eradicated. It is true that custom and habit work toward stability of habitat and occupation. The older one grows, the less one likes the thought of moving to another locality or of taking up another line of work; the less one likes, also, to have one's routine of life interfered with in any way. But, notwithstanding these undoubted facts, it still remains true that

variety of stimulation is the first condition of an alert mind. One must be almost abnormal who is not tempted by the prospective delights of a journey to new regions; who is not attracted by the "news" page of his daily paper, irrespective of the bearing of its contents upon his own life or work; whose attention is not caught and held by the novel and unusual in the routine of his daily life. The instinct that impels us to seek variety, to attend to the new and strange, is a wise provision of nature, for it is through this instinct that attention to new or changed conditions is insured, and *it is the one important function of attention to concern itself with the new, leaving habit, custom, and automatism to take care of the old and familiar.*

3. It is obvious that the child is more completely the slave of distracting influences than is the adult, and that the younger the child, the more pronounced is this characteristic. The pupil in the lowest grades of the school is quite incapable of following a single line of effort, either in play or in work, for a long period. One who watches children at play will be quickly impressed by the rapidity with which one game or activity gives way to another. At one moment the child seems to be absorbed in a certain play object. As you watch him, you think that so deep an interest will last indefinitely. But in another moment, perhaps, this object has been dropped and another taken up, and, try as you will, you cannot force the interest back to the first object that attracted it.

It is necessary for the educator to recognize this fundamental fact at all stages of the educative process. Variety

must be constantly introduced in some form or another if the energy that expresses itself through the activity of attention is to be expended economically. The successful teacher in the elementary school is he who can clothe the familiar in a new garb; for repetition and reiteration are essential at all points of the teaching process, and, unless repetition and reiteration can be robbed of their monotony, they lose by far the greater part of their efficiency.

4. The operation of the first law in this phase of its application, however, involves a *danger* that should not be overlooked or minimized. Although attention may be secured by changing the occupation of the pupil the moment tedium sets in, the net result, if such a policy were applied *ad libitum*, would be far worse than any loss of energy that might come from the inattention due to tedium. If a pupil is always relieved of a task of duty the moment that it becomes irksome to him, — the moment that he grows "tired" of it, — development is bound to be arrested upon a very primitive plane. To stick to one line of effort in spite of tedium is the characteristic that differentiates work from play; education is essentially *work*, and the school must never blind itself to the necessity of requiring the conditions of work in the environment that it affords. Here, as elsewhere, there must be a nice adjustment of opposing forces. The first law of attention will certainly find frequent employment through the satisfaction of the desire for variety; but its field will manifestly be much wider in the earlier than in the later stages of the educative

process, and at all times the law must be applied with a full recognition on the part of the teacher of the dangers that it involves.

No small part of the criticism passed by foreigners upon American schools finds its justification in the fact that American teachers recognize the necessity of variety, but neglect its dangers. The result of such practice is haphazard, "scatter-brained" effort, devoted to a multitude of diverse tasks, but never sustained and directed toward the complete accomplishment of any one line of work. The "formal" subjects of the curriculum — reading, spelling, penmanship, arithmetic — naturally suffer most seriously from this oversight. The notion that monotony must be avoided at any cost has led to the attempt to teach these branches "incidentally" in connection with more interesting and attractive "content" work. The results are what one who was well grounded in fundamental psychological principles might easily have foreseen.

The problem here presented is difficult but not impossible of solution. There must needs be variety in the drill required for the mastery of the formal subjects, but this variety must always respect the fundamental nature of the form that is to be impressed. So long as this is done, no harm will result, but when variety and interest become ends in themselves, — when content work of all kinds becomes the only explicit subject of instruction, — elementary education misses its main purpose.

5. (*b*) *The Play Instinct.* This may be looked upon as but a specific expression of the instinctive desire for change and variety. Play is characterized by activity which is sufficient in and for itself; the activity of play is an end in itself. The play instinct doubtless has a deep and vital function in the development of the child, insuring

the activity essential to the growth and coördination of the muscles and to the development of motor or kinæsthetic images.[1] The play instinct is largely used in kindergarten practice as a simple and effective means of securing and holding the pupil's attention. It has also a legitimate field of application in the lower grades of the elementary school, where the repetition that is essential in the learning of arithmetical facts, word-forms, and the like can be made more interesting by employing "games."

6. The use of this instinct is obviously subject to the dangers and limitations mentioned in connection with the instinctive desire for variety. If carried too far, the pupil is apt to gain the notion that all of the routine work of the school must be made interesting and attractive by the introduction of the play element. The powerful ideal of duty, which carries men safely through so many crises, cannot be developed under such conditions, and it is safe to say that no more important task is imposed upon education than to develop this ideal. But one should not rush to the other extreme and aver that the play instinct is entirely out of place in the school. Again there must be a nice adjustment of forces; again one must strive to hold the clear perspective. An environment of irksome tasks, unrelieved by anything that could gratify the play instinct, would be as fatal to the ideal of duty as an environment that gratified instinct at every turn.

What is termed common sense may be very safely trusted in determining the limitations to which the play instinct must be

[1] Cf. G. S. Hall: *Adolescence*, New York, 1904, vol. i, pp. 202 ff.

subjected. The writer once heard an institute instructor recommend a certain game with bean-bags for use in drills on the facts of multiplication. The teachers who were present agreed with the instructor as to the value of the device, believing it to be recommended for very young children only. But when the instructor intimated that it could be profitably utilized in the seventh and eighth grades, the teachers questioned its value. The great majority of those who have had actual experience in handling children know pretty accurately what can be done with them, although even such teachers will sometimes "lose their heads" when a new and radical departure is proposed by one high in authority and presented with the zeal and earnestness of assured conviction. It is for this reason that the university professor of education is apt to do so much harm if he lacks practical experience in dealing with little children. He speaks with the voice of authority, and he generally believes implicitly in the absolute validity of his untried theories.

7. (*c*) *The Instinct of Curiosity.* Like the instinct of play, this is but a specific expression of the desire for novelty. It is evidenced by the constant succession of "Why's" with which children of certain ages besiege their parents and teachers, and by the "Paul Pry" activities of both children and adults. Like all instincts, it has its roots in past necessity. The first manifestation of dawning intelligence in the race was doubtless the random investigations that followed upon the birth of the instinct of curiosity. In the beginning this instinct is easily gratified, for primitive curiosity looks only for something new, and anything that is new suffices. The search after hidden causes, the passion to know the reason for phenomena, is

an acquired characteristic formed through the operation of active attention in carrying to a successful issue the vague desires aroused by the instinct.

The instinct of curiosity has a place in education. It can be utilized in directing attention to natural laws that explain phenomena whose mystery appeals to the child-mind, — spectacular phenomena especially, like the thunderstorm, the earthquake, etc. It is safe to lay down the rule that, whenever curiosity is aroused concerning something of legitimate interest, the teacher should do everything within his power to gratify it. Attention can at that time be easily secured, and truths driven home that might prove highly resistant if left until a later period.

A great calamity, like the California earthquake or the Galveston flood, that attracts universal attention for a brief period, opens the way for the explanation of the catastrophe in terms of natural law. At such a time all children are open and receptive to whatever instruction may be offered that is germane to the center of interest. It is strict economy to make such discussion a special order of the day, interrupting the program, if necessary, in order to get from the burning interest of the moment every particle of educative value that can be extracted. Legitimate occasions of this sort come so infrequently that one need fear no serious effect upon the regular routine. In the writer's experience, for example, only the following events within a period of five years were deemed worthy of such treatment; the Pelee disaster, the Baltimore fire (a center of interest insuring the ready assimilation of geographical facts about that city), the outbreak of the Russo-Japan War, and the San Francisco earthquake. Matters that are of less general interest, owing to the remoteness of the scene

of action or other causes, — for example, the eruptions of Vesuvius, the Valparaiso earthquake, and the Hong Kong typhoon, — may be profitably referred to in the geography classes, but will hardly repay a special order of business or a breaking into the regular program.

8. Inasmuch as the instinct of curiosity is mainly excited by the spectacular, it is clear that its use in the school should be temperate. Of course, a spectacular halo may be thrown around almost any event, but such a policy will sooner or later defeat its own purpose: witness, for example, the experience of the "yellow" newspapers in attempting to find a new sensation for each issue. Their cries of "Wolf!" have been proved so often to be bogus that the public will no longer heed them, even though the wolf should happen at some time to be real. There is back of this a sound psychology that operates with equal force in the schoolroom. The teacher who constantly caters to the pupils' love of the spectacular must go to greater and greater lengths if he would attract the attention of his pupils, and the time must come, sooner or later, when his *blasé* charges will be bored even by matters of legitimate interest.

9. (*d*) *The Instinctive Liking for Bright Colors, Sharp Contrasts, and Intense Stimuli of All Kinds.* One of the most primitive methods of attracting attention is the use of bright colors. This instinct is commonly employed in the lower grades of the school by the use of colored objects (balls, splints, etc.), by permitting pupils to write and draw with colored crayon, and by other similar prac-

tices. The use of colors and contrasts, however, for the purpose of securing attention to drill processes is subject to a very important limitation. It has been long known that in teaching children to count, the objects used must not be too attractive in themselves. Variety must be provided, but the qualities of the various objects must be of such a nature that they will not distract the attention from the process in hand.

In their anxiety to provide a variety of objects for drill in counting and in combining numbers, some teachers select flowers that are brightly colored, cubes and balls of contrasting hues, and not infrequently edible articles such as nuts and fruits. If the reader is skeptical as to the distracting influence of these qualities that are extraneous to the matter in hand, let him watch an exercise, say, in counting peanuts just prior to the noon dismissal.

10. (*e*) *The Instinct of Construction.* The child likes to put things together, to make things, and this instinct is of the highest value in the lower grades in securing attention to arithmetical processes. The constructive instinct must not be confused, however, with the acquired interest of construction [1] which is a much higher product, and works through a series of systematic efforts toward the accomplishment of some remote end. The pure primitive instinct is best illustrated by the child's rather aimless manipulation of blocks in the making of whatever may be dictated by momentary fancy. It can be turned to educative account by leading the pupil to count the number of blocks that

[1] Cf. *Educative Process*, pp. 106 ff.

he uses for this purpose or that, by encouraging comparisons of different magnitudes, and by suggesting possible numerical combinations; for example, "Let us make a wall that will be three inches high and twelves inches long," using inch cubes; "Make the picture of a house with splints, having the house ten splints long and one half as high, with three windows in the side"; etc.

11. The instincts discussed above do not exhaust the list of those that function during childhood and which form the basis for the manifold operations of the first law. They are, however, the principal instincts with which the school is concerned from the standpoint of passive attention. In the next chapter, other instincts will be discussed that operate in a slightly different fashion. But it must be borne in mind that all instincts have this in common: they are native, inherited forces, forming the basis upon which the educative process must lay its foundations. Those that have just been discussed operate educatively through securing passive attention to mechanical repetition. Those that will be discussed in the next chapter may express themselves, it is true, in attention of the passive order; but they are educationally important in that they may be readily transformed into incentives for active attention; in other words, the anticipated gratification of the instinct forms a remote end toward which effort may be directed as a necessary condition of this gratification.

12. *Summary.* The first law is to be used extensively only in the earliest stages of education. Here the teacher's first duty is to provide conditions that will make effort

attractive. This duty is partially fulfilled by frequent changes in the content of the school exercises, by utilizing the play instinct, by a judicious use of intense and contrasting stimuli, and by encouraging the pupil to employ his constructive instinct in an educative manner. These means are always in place during the early school years. They may occasionally be employed in the later stages of instruction, and with abnormally backward children (feeble-minded children and imbeciles) it is doubtful whether they can ever be entirely dispensed with. To continue with them, however, in the education of normal children is to run a serious danger of arrested development.

REFERENCES. — J. R. Angell: *Psychology*, New York, 1905, ch. xvi; Irving King: *Psychology of Child Development*, Chicago, 1903, ch. xiii; Thorndike: *Principles of Teaching*, chs. v, viii; Kirkpatrick: *Fundamentals of Child Study*, New York, 1906, chs. viii–x; W. James: *Talks to Teachers*, New York, 1902, ch. vii.

CHAPTER XI

The Problem of Attention (Continued): The Operation of the Second Law; Incentives

1. The essence of active attention is concentration upon matters that are not in themselves attractive, — that do not in themselves naturally solicit attention, — for the sake of some desired end, the attainment of which such focalization will further. It should be remembered that active attention does not preclude the operation of instinct; in fact, probably all operation of active attention is dependent primarily though indirectly upon some instinctive desire. Instinct is the force that makes the *idea* of the remote end effective in controlling action along a given line until one either gains the end sought, or lapses into secondary passive attention in which the means of attaining the end become attractive and interesting in themselves.

For example, the pupil is attracted to bright colors because of the instinctive impulse to attend to strong or contrasting stimuli. The end here is immediate, the attention passive. On the other hand, the pupil may, by effort, attend to a dull lesson, because he does not wish a fellow-pupil to "win out" over him in a recitation. The end here is remote, but it is made effective by the instinct of emulation. Instinct operates in the one case just as clearly as in the other; but in the second

instance it operates on a higher plane, because the end has been moved into the future, a process of ideal or imaginative construction is demanded for its envisagement, and action or adjustment must be controlled with reference to the end sought.

Almost every case of willed or volitional action is similarly determined in the last analysis by one instinct or another. The student at college prosecutes his studies industriously, even though they are not perhaps always interesting; he is held to the task because he does not wish to let others get the degree when he fails (instinct of emulation), or because he wishes to secure remunerative employment because of his training (instinct of self-preservation), or because he wishes to avoid the unpleasant consequences of failure (instinct of fear). Similar analyses could be made of dominant motives in any walk of life; always, however, with this proviso: whenever the task becomes attractive in itself and the remote end is lost sight of temporarily, the attention has passed over into the secondary passive form. Thus the student, driven to his work by one of these various ideals that are supported in their turn by fundamental instincts, becomes gradually absorbed in his study and no longer thinks either of the fellow-students whom he is trying to outdo, of the position that he has hoped to obtain, or of the unpleasantness that may result from failure. But whenever this secondary passive attention lags, — whenever primitive impulse again asserts its inherited right to distract, — the idea, backed up by its appropriate instinct, must act again as a spur to renewed effort.

2. *Incentives.* The idea of a remote end toward which effort is to be organized is known as an *incentive.* With certain qualifications, the problem of securing and holding the attention of pupils may be said to be the problem

of providing effective incentives. The first law is legitimately applied only up to the point where an effective incentive can be introduced — up to the point where a remote end can be made to dominate the pupil's mind and hold him to whatever tasks are imposed as a condition of attaining this end.

This point is approximately coincident with the birth of what is termed the capacity of the child for reasoning. Reasoning, in its simplest form, is nothing more nor less than a conscious application of past experience to a given situation. Logical reasoning, however, is more complicated in its nature. It presupposes the ability to *condense* past experience into concepts, and to manipulate these concepts through symbols, — usually words. An end that is fairly remote in its nature must be held before mind in a compact form if it is to be effective over action, hence the conditions imposed by active attention of a high order are quite similar to those imposed by logical reasoning. But active attention is possible in cases where the experience has not been condensed into concepts, but still functions concretely. This form of attention, however, is directed to ends that are not very remote. As the pupil increases in the capacity to form concepts, therefore his capacity also increases for holding in mind ends that are further and further removed from the present impulse.

Just where this capacity is to be attributed to the pupil in school is a matter of dispute. Some practitioners would assume that the child is capable of governing his action with reference to remote ends immediately upon entering school, but this is manifestly not in accord with practical schoolroom experience. It is probable, however, that, if a beginning is made with incentives that appeal to fairly immediate ends, and if a gradual progression is insured, the pupil should be able in

the third or fourth grades to realize the import of putting forth effort during the term in order that he may make a satisfactory grade at the term's close. This also suggests the importance of having relatively short terms in the earlier years of the elementary school.

3. *Positive and Negative Incentives.*[1] A remote end may make either a positive or a negative appeal to one's desires. In the former case, action is governed and directed for the purpose of enjoying some pleasant consequences; in the latter case, action is controlled for the purpose of avoiding some unpleasant consequences. In other words, incentives may be divided into (1) those that depend for their efficacy upon the hope of a reward, and (2) those that depend upon fear of punishment. Needless to say, one and the same object sought may make its appeal either from the positive or negative side. Further

[1] *White's Classification of Incentives.* In his treatise on school management, Mr. White makes a distinction between "natural" and "artificial" incentives. Under the former head, he includes those incentives that grow "naturally" out of the effort involved. Thus the perception of a distinct need for knowing arithmetic would be the natural incentive for studying and mastering arithmetic. These natural incentives are, of course, the most effective whenever it is possible to employ them. It is one of the peculiar duties of education, however, to impart knowledge at a period in the individual's life when he is unable to see very far ahead. The knowledge that is imparted, on the other hand, generally owes its value to the fact that it will be useful in adult life. For this reason natural incentives can be employed very infrequently. Mr. White's theory is also defective in that many of the incentives that he classes as "natural" are really "artificial" by his own definition, while others are not incentives at all, but rather acquired interests that owe their efficiency to the operation of the third law. When, for example, he speaks of the love of knowledge as an incentive, this is either an acquired interest or an ideal of a very elaborate type.

than this, one and the same object may appeal to the same individual now from this and now from that point of view. The pupil may be impelled to learn a dull lesson in hope of "getting ahead" of his fellow-pupils, or he may learn the same lesson from fear that his fellow-pupils may "get ahead" of him, and the consciousness of the end to be gained may alternate rapidly between these two desires. Back of every hope there is a complementary fear, and back of every fear, a complementary hope.

4. These facts involve one of the most important practical principles in school management. *In general, incentives should appeal to the pupil from the positive rather than from the negative point of view.* This principle depends for its validity, not upon mere sentiment alone, but upon the rigid requirements of economy. It is only a practical expression of the well-known psychological law that depression chokes up the channels of energy, while hope and buoyancy tend to liberate energy and make it available. It is the verdict of experience that one can put forth more energy and do more effective work if the confidence of success overbalances the fear of failure.

This general rule is certainly subject to some qualifications. The fear that amounts to desperation sometimes impels one to put forth almost superhuman effort. But, in this case, it is seriously to be doubted whether the so-called "fear" of desperation is really deserving of that name. Its keynote is exhilaration rather than depression; it has passed beyond the pale of a distinctly unpleasant emotion, and so should be characterized by another and more appropriate term. Recent theories of emotion advanced by competent psychologists are quite in

accord with this view.[1] In general, then, fear expresses itself in less violent forms, — moodiness, lack of confidence, dissatisfaction with one's self, etc., — and these are all depressing agencies.

5. It is not to be concluded, however, that the negative incentives have no place in education. In extreme cases, where all other measures appear to be futile, the fear of failure, or of physical pain, or of the loss of a privilege, may be the only available means of possible redemption, and as such its employment is undoubtedly justified. It is safe to lay down the rule, however, that, if fear is stimulated, it should be limited to individual cases. In other words, the great majority of pupils will not need an extreme incentive, and to use the stimulus of fear upon an entire class is to run the risk of needless worry on the part of pupils who do not need to worry, and to whom, perhaps, worry would involve a nervous strain that would quite discount any positive benefits to be derived. This limitation in mind, we may pass to the specific consideration of the fear incentives.

6. *Incentives in which the Predominant Appeal is Negative.* Under this head are to be included, obviously, all school practices that inflict punishment for failure to perform some school task. In Chapter VIII, punishments were discussed, but in another connection, — namely, as means of securing order in the classroom. The point of departure there was the necessity for preserving con-

[1] For example, J. R. Angell: *Psychology*, New York, 1905, pp 328 ff.

ditions favorable to the welfare of the class as a whole. In the present connection the fear of punishment as an incentive for individual effort is the point at issue. In other words, is it legitimate or wise to employ what we have termed penalties not only for offenses against discipline, but also for failure on the part of individual pupils to concentrate upon the tasks required of them, even though this lack of concentration does not interfere with the rights of others?

7. Reverting to the principles established in the preceding discussion, it will be recalled that undesirable impulses tend to be inhibited if they are closely associated with painful consequences. The pain-reaction is justified in offenses against discipline, because the impulses that are checked are, in general, unsocial impulses that should always be inhibited. Applying this principle to the use of pain stimuli as incentives to effort, it is clear that the justification or condemnation of such a policy depends primarily upon *what association is made.* If the pupil always connects lack of application, mind-wandering, procrastination, and similar factors, with painful consequences, it is clear that he will tend to curtail the operation of these factors in his school life. If, on the contrary, the association is between the pain stimulus and arithmetic or spelling or geography, it is clear that the penalties inflicted will defeat their own purpose in a most disastrous fashion.

The two forms of punishment most commonly employed to incite pupils to greater effort are: (*a*) corporal punishment, and (*b*) "scoldings." There are very few teachers

probably, who now use corporal punishment as an incentive to effort, and the prevailing practice may, in this instance at least, be accepted as in harmony with fundamental principles. For a child to "learn his lessons" simply because he fears the pain or physical punishment in case the lessons are not learned means that he is assimilating knowledge with reference to a very primitive need. Whether this fact will, as Professor Dewey[1] implies, absolutely prevent the knowledge gained in this way from being applied to the situations of life, is to be doubted; but it is clear that such assimilation will be at least uneconomical as compared with that which proceeds from a higher purpose. On the other hand, if a pupil can be stimulated to effort in no other way, it is far better that his tasks be performed, even inadequately, through the stimulus of physical pain than that he be permitted to grow up in ignorance. Especially would physical stimulus be justified if the lack of application on the part of an individual pupil interfered with the progress of the class as a whole.

8. In extreme cases, where the fear of pain is needed as a stimulus, a temperate use of corporal punishment is probably to be preferred to the employment of the more common penalty, — "scolding." And yet this is not to say that there is no place for the latter stimulus. A stinging rebuke may temporarily depress a delinquent pupil, and it may even rankle in his memory for an indefinite period, but it is sometimes the only thing that will stir him

[1] J. Dewey: *The Child and the Curriculum*, p. 38; cited by Thorndike: *Principles of Teaching*, p. 56.

to effort. One general principle, however, certainly conditions the efficiency of this measure: "Scoldings" are effective in inverse proportion to the frequency with which they are employed. Rebukes lose their "edge" far more quickly than corporal punishment. The teacher who continually "nags" his pupils will find that the good results will be less and less noticeable as the nagging becomes more and more frequent. A quiet rebuke, administered without passion or rage, may be extremely effective if it breaks in upon a long period of harmony and good-will, but there is nothing to which a pupil will more quickly become callous if the measure is repeated frequently.

The sin of nagging is the most common vice of the woman teacher, and in the popular mind it is undoubtedly the characteristic *sui generis* of the traditional "schoolma'am." So easily does the nagging proclivity become a habit, and so disastrous are its effects, not only upon the discipline of the school, but also upon the temperament and social qualities of the teacher who indulges it, that every woman who goes into the schoolroom should watch herself closely to prevent the genesis of the practice.

9. To summarize: Attention cannot be economically or adequately secured by introducing the fear of punishment as an incentive. Nevertheless there are very exceptional cases where the employment of such an incentive is the only measure that will have any effect upon the pupil. In such extreme cases, corporal punishment is probably to be preferred to "scolding," although there

are occasions when rebukes will stimulate pupils to greater activity. The utmost care, however, is required in employing either of these two forms of stimulation, and it is perhaps the safest policy for the beginning teacher to avoid them entirely until he feels absolutely certain that he can use them effectively and without working an injury. The use of corporal punishment as an incentive and its use as a penalty for breaches of discipline are not to be confused with one another. The latter may be justified where the former would be fatal.

REFERENCE. — White: *School Management*, pp. 185–188.

CHAPTER XII

The Problem of Attention (Continued): Application of the Second Law through Positive Incentives

1. The most important applications of the second law imply the hope of reward as an incentive to effort. It will be recalled that the interposition of a remote end as an object to work for does not preclude the operation of instinct. It simply postpones the satisfaction or gratification of an instinctive desire, using the desire as a means of stimulating effort toward its gratification. When instinctive interests are thus made incentives to active attention, they are transformed through the process, becoming what may be termed "acquired interests." Such interests may, in course of time, be so far removed from the original instinct that all trace of the latter seems to have disappeared; but careful search will always discover a core of instinct at the center of every acquired interest, no matter how elaborately the latter may have become complicated in its development.

It would follow from this that the remote ends which are used as incentives to effort must, in the early stages of education, appeal to one or another of the primitive instincts, and that this appeal must be direct and unequivocal if the incentive is to function effectively. Incentives will accordingly be "high" or "low" as they appeal to an

acquired interest far removed from a primitive instinct, or to a primitive interest closely correlated with a primitive instinct. Education must manifestly begin with incentives of the lower orders and pass to those of the higher orders; but, even under the most favorable conditions, this transition will be but gradual.

2. The following discussion will consider incentives in the ascending order of merit, employing the standard set forth above. The accompanying outline will give a general view of the treatment:—

(*a*) Incentives that make a positive appeal to the instinct of emulation.
  (1) Competitive prizes of intrinsic value.
  (2) Competitive prizes not intrinsically valuable.
  (3) Privileges.
  (4) Immunities.
  (5) Display of pupils' work.
  (6) Grades, marks, and promotions.
(*b*) Incentives that make a positive appeal to the social instincts.
  (1) Praise, commendation, and adulation.
  (2) Pupils' pride in the good name of the school.
(*c*) Ideals as incentives.

3. (*a*) *Incentives that make a Positive Appeal to the Instinct of Emulation.* (1) *Competitive Prizes of Intrinsic Value.* To offer material prizes as incentives to effort is generally recognized by authorities upon school management as bad practice. It is contended that such prizes appeal only to a very few pupils, who are, in general, those that need incentives the least; that the prize system tends

to develop unduly the selfish instincts, often giving rise among the brighter pupils (who alone stand a chance of securing the prize) to such perverted forms of the property instinct as avarice and cupidity; that, even when rivalry exists, such rivalry is usually between two or three of the brighter pupils, and that this condition greatly augments the danger that healthy emulation will degenerate into spite and jealousy; and finally that the material prize offers no inducement that could not just as well be involved in an immaterial reward. Some authorities[1] maintain that prizes awarded to all who reach a certain grade rather than to one who gets the highest may be legitimately employed. This is certainly an improvement on the traditional prize system, but still fails to meet the second objection.

4. (2) *Competitive Prizes not intrinsically Valuable.* Among the commonly employed incentives of this class are merit cards, diplomas, badges, buttons, medals, etc. Where only a "first" prize of this sort is offered for competition, many of the disadvantages involved in material prizes will result. Competition is narrowed to a few bright pupils, while the duller pupils, needing incentives, are stimulated either not at all or in a negative direction, becoming so depressed, perhaps, by the fact of their own inefficiency that they put forth less effort than they would otherwise. Such incentives also tend to develop certain traits of character in the very bright pupils that are extremely undesirable, — conceit, priggishness, etc. While

[1] For example, S. T. Dutton: *School Management*, New York, 1904, pp. 107 f.

the system is not so seriously to be condemned as the practice of offering material prizes, it is still to be looked upon with a degree of suspicion, and to be resorted to only under exceptional conditions. It is safe to say that a policy of providing penalties for poor work is far better and more effective than the policy of offering such prizes as have already been mentioned for good work. That is, the appeal would reach and stimulate a larger number of pupils.

5. (3) *Immunities.* In general, the granting of holidays and the exemption of pupils from examinations are to be considered as bad practice. The granting of holidays is less objectionable than exemption from examinations, but it is disadvantageous in that it places a regular school duty in a bad light by making of it a punishment. Under a strict interpretation of the laws of many states, the practice would probably be illegal.

The very common practice of exempting pupils from examinations in case they reach a certain grade or "passing mark" in the daily work is open to serious objection for two reasons: (*a*) it places the examination under a stigma by implying that it is a punishment; (*b*) it deprives pupils of the privilege of taking the examination: this may not appeal to them as a privilege, but if the contention that the examination is one of the most valuable parts of the educative process is valid,[1] it is certainly unjust to deprive the benefits of this exercise to the very pupils who would profit by it in the highest measure.

[1] Cf. *The Educative Process*, ch. xxii.

6. (4) *Privileges.* Among the privileges that are commonly employed as incentives are monitorial positions, favored locations in seating, high rank upon a "roll of honor," etc. The general rule that should govern the use of these incentives is this: Privileges that bring constantly before the poorer pupils the consciousness of their inferiority should be avoided; the depressing influence in such cases far overbalances any advantage that the system may possess. This applies principally to the seating of pupils.

In the case of monitorial positions as rewards for effort, the situation is somewhat different. The employment is only for temporary periods during the day, the number of monitors to be employed is generally large enough to supply places for most of the pupils, and the system puts a premium upon service, making it a privilege instead of a penalty. In the lower grades this incentive is among the best of those that appeal to the instinct of emulation. Its main disadvantage lies in the fact that monitors must be changed frequently if the privilege is to be effective. This involves the "breaking in" and training of pupils for new duties, thus detracting somewhat from the economical operation of the school machinery.

A "roll of honor" is permissible if it is not constantly in evidence. All devices of this sort must be used temperately and not permitted to become the be-all and end-all of the pupil's existence. Too often the roll of honor becomes this in the eyes of the pupils whose names are upon it, while with the less industrious (or the less fortu-

nate) it becomes a list of the "goody-goodies," — a type of pupil that an overplus of "fol-de-rol" tends to develop.

7. (5) *Exhibition of Pupils' Work.* This incentive is coming into very general use in the better schools. It provides a means of gratifying the instinct of emulation without involving many of the dangers inherent in the more artificial devices discussed above. It also tends, when handled carefully, to arouse in the pupils a sense of pride in the work of the school as a whole.

The exhibition of work, however, involves some marked dangers that must not be overlooked or minimized. Chief among these is the undue emphasis that it places upon form as contrasted with content. Where work is suspended upon the wall in long rows, — essays, examination papers, drawings, etc., — it is the total effect of the display that counts, not the individual merit of any one paper, and it is the total effect in artistic appearance rather than in the intrinsic worth of the composition or the examination as revealing the thought of the pupil. Under these conditions it is the pupils who produce the neatest work that are singled out for the highest honors, and these are not always the pupils who do the best work from the standpoint of thought and content. Again, the exhibition of work is apt to overemphasize written work at the expense of oral work — a sin which the public school commits far too frequently in other ways than this. Oral expression is vastly more important than written expression, and the energies of the school should be devoted toward its training far more strenuously than is now the case. If, how-

ever, written work becomes the standard of efficiency, this reform will receive a serious setback.[1] Under these qualifications, the exhibition of work may be recommended as safe and effective incentive.[2]

8. (6) *Grades, Marks, and Promotions.* These devices occupy a middle position in that they make their appeal in part to the instinct of emulation and in part to the social instinct. It is probable that the most effective appeal is made from the latter standpoint, at least in the higher grades. With pupils in the adolescent period and somewhat earlier, the inducement to effort that comes from hope of promotion or from fear of retroversion owes its force largely to an instinctive desire to be with one's fellows — to remain an integral part of the class with which one has been associated. The desire to obtain a high standing, while often an expression of the instinct of emulation, is sometimes also due to the desire to be "with the crowd," — a desire which is negatively expressed by the instinctive aversion toward abnormality — toward a noticeable differentiation from the "crowd." In whatever class these incentives are to be placed, however, every teacher (and every pupil) will testify as to their efficiency in stimulating effort.

9. There is a tendency[3] at the present time to criticise the employment of these devices, especially in the elemen-

[1] Cf. an excellent discussion of this matter in P. Chubb: *The Teaching of English*, New York, 1903, pp. 106 ff.

[2] For valuable suggestions on this topic, cf. J. Taylor: *Class Management*, New York, 1903, pp. 95 ff.

[3] Cf. Dutton, *op. cit.*, pp. 100 f.

tary school. The evil effects of worry, among pupils of nervous temperament, are frequently urged against the promotion and marking system. It is also maintained that promotion, in the school use of the term, has nothing in common with any condition to be met in real life. The great men who were dullards in school are pointed out as evidence that scholastic standards and the standards of adult society in measuring efficiency are vastly different. For these and other reasons the formality and ceremony involved in "passing" from grade to grade have, in many cases, been dispensed with, and pupils are advanced with little reference to their attainments or their ability to do the work required of the grade to which they are sent. This "reform" has, of course, gone hand in hand with the abolition of final examinations in the elementary school.

While the arguments against a rigid system of grading and promotion carry a certain measure of conviction, they involve several pronounced fallacies. If the work of the school is not similar to the work of life, the fact surely offers no excuse for doing it in a slip-shod fashion, and experience teaches that it will be done in a slip-shod fashion, unless definite standards are set up and rigorously adhered to. That all or even an appreciable proportion of the great men of to-day were dull pupils at school is a statement that must be proved by statistics of an accurate sort before it can be used as a basis for reorganizing the school system. Aside from a few exceptional cases that attract notice purely because of their

exceptional nature, whatever evidence is now available seems to point quite in the opposite direction. That children sometimes worry needlessly about promotion is doubtless true. That this condition ever reaches the extraordinary dimensions attributed to it by some authorities is gravely to be doubted — at least until proofs are forthcoming. Some worry is bound to be involved in carrying out any task or duty that is really worth while; in fact, the worry is sometimes directly proportional to the worth. On the other hand, to take away the formality of "passing" is not only to "let down the bars" and encourage low standards or no standards at all, but it is also to deprive the teacher of one of the most powerful incentives that he can command.

10. But even if it is decided that the grading of pupils and the formalities incident to promotion are legitimate incentives, the dangers pointed out above are real dangers, and pains must be taken to counteract them, or, at least, to mitigate their evil influences. "Passing" can easily be made altogether too important a thing in the pupils' eyes. After all, it is only a device, not an end in itself, and the moment that it becomes an end in itself, it is in a fair way to defeat its own purposes. It is certainly bad practice to keep the fear of failure continually before the pupils' mind. It is equally bad practice to encourage the pupil into the belief that "making the grade" should be his sole and only end in life. Like all other devices, promotion, considered either from a positive or from a negative standpoint, — either as hope or fear, — should

be used as a spur to effort *only when a spur is needed*, and when some more worthy incentive fails to operate. Whenever a pupil falls behind in his work, and fails to respond to the suggestions and hints of the teacher, it is but justice to him that he be informed of the questionable nature of his standing and of the likelihood that, unless greater effort is forthcoming, failure or retroversion to a lower grade will result.

An occasional retroversion in mid-term may prove a valuable and effective stimulus to other less weak but still doubtful cases. This should not be commonly resorted to, of course, because of the effect upon the penalized pupil; but in cases where pupils are passed conditionally, the condition should be fulfilled to the letter if it is to mean anything in the eyes of the pupils. Too often, conditioned pupils are permitted to remain in the advanced grade, although their work falls very far below the standard. This is a most reprehensible form of "soft pedagogy."

11. *Grades* and *marks* are indispensable factors in the mechanics of grading and promotion. Some authorities disapprove of the practice of letting pupils know their grades until the end of the term, and even then, it is recommended, the pupil should simply be recorded as "passed" or "failed" or "conditioned." Certainly there is much to be said against the grading system, and yet, like the system of promotions of which it is only one phase, the difficulties lie mainly in its abuse. Here as elsewhere it is possible to take a middle course, taking advantage of whatever efficiency the system may possess in stimulating

to greater effort, and still stopping far short of making marks an end in themselves. A monthly statement of pupils' standings, sent to the parents, is one of the best methods of securing the effective coöperation of home and school. It serves as a valuable reference in case, at the end of the term, there is any difficulty about failure to promote. Needless to say, great care must be taken to make these reports *accurate* indices of the pupils' work. While elaborate bookkeeping should be avoided, it is a simple matter to record at the close of each day a numerical estimate of each pupil's work in different subjects. These estimates can be averaged at the end of the month. For the report cards, letters are to be preferred to numerical estimates, because of the ease with which one figure's difference may change a pupil's fate, and the difficulty of satisfying both parents and pupils that John, whose grade is 74, should be kept back; while James, whose grade is 76, may be sent on.

The writers upon school management are not inclined to admit that any incentive having its basis in the instinct of emulation is justified, except in so far as the operation of the incentive does not involve the degradation of those who do not succeed. Professor Seeley's discussion [1] of the matter is typical: "As emulation is a natural instinct, it can be used in the school without evil effects. The principle governing its use should be *excelling without degrading others*. . . . A child reads a paragraph. 'Who will try to read it better?' asks the teacher, and many hands will be raised in generous and ambitious rivalry. Children are invited to do their best in a written exercise, and

[1] L. Seeley: *A New School Management*, New York, 1903, pp. 172 ff.

the teacher selects the best and commends it. Rapid and neat work in number is called for, and the successful pupil is praised. . . . Such rivalry is healthful, generous, and inspiring." It is difficult to see that these recommendations remove the initial difficulty. The very question, "Who will read this better?" implies that the pupil who has just read must take a low rank. In fact, emulation *must* involve this factor if it is to be emulation.

The same criticism could be made of the defense of emulation presented by the Jesuit father, Robert Schwickerath.[1] In mentioning the strictures that have been passed upon the Jesuit system of education because of its emphasis of emulation, he says: "That these exercises were by no means intended to develop the bad emulation, or false self-love in the young, is evident; this would have been little to the purpose with religious teachers. . . . What is appealed to, is the spirit of good and noble emulation, — *honesta æmulatio*, as the Ratio says, — and that by a world of industry which spurs young students on to excellence in whatever they undertake, and rewards the development of natural energies with the natural luxury of confessedly doing well. This makes the boys feel happy in having done well, however little they enjoyed the labor before, and will rouse them to new exertions. Gradually they may then be led to higher motives in their endeavors."

It must be confessed that the distinction between good and bad emulation is not very clear from this discussion. At any rate, "the natural luxury of doing well" has very little affinity to emulation as an instinct. Much more to the point is the same author's positive justification of the Jesuit practice, laying aside all sentimental distinctions that fail to distinguish: "Is it probable that young pupils will readily be diligent, when told that *they ought to do* their work? Kant's teaching of the

[1] R. Schwickerath: *Jesuit Education*, St. Louis, 1903, p. 512.

autonomy of the human reason is not only deficient, but positively erroneous; but least of all will the rule, *you ought because reason tells you so*, have any effect on the young." [1]

In the problem of emulation we have an example of that condition which has recurred so frequently in our previous discussions, and which sometimes makes the entire process of education appear to be a huge paradox. Education, like civilization, is an artificial process, — a compromise between the brutal and the human, a readjustment from primitive to social conditions. The teacher cannot always choose the methods of this readjustment. The cloth must be cut to fit the wearer, not the tailor. That the instinct of emulation sometimes works evil in the school does not in itself condemn it; the evil must be measured up against the good. Success for one may mean failure — must mean failure — to another; but if this failure becomes a spur to increased effort, the net result may be commendable. It is the same test that must be applied over and over again in education: not, Is there any danger in using this method? but rather, Are the possible benefits numerous enough and certain enough to warrant the risk? If this test is applied to emulation as a school incentive, especially during the preadolescent period, there can be little doubt of a favorable verdict.

12. (*b*) *Incentives that make a Positive Appeal to the Social Instincts.* (1) *Praise, Commendation, and Adulation.* That a child will put forth effort in order to win the praise or commendation of his parents or teachers is a proposition that needs no proof. That the fact is due to the operation of an instinct is also not to be doubted, for the tendency appears too early in the child's life to admit of any other explanation. Whether the instinct

[1] Schwickerath, *op. cit.*, p. 513.

belongs to the social order or is to be classed as a form of emulation is not a matter of serious moment in the present connection. The fact, however, that praise is effective even if there is no competition in gaining it, would seem to eliminate emulation, while the fact that the love of praise is closely associated with the altruistic tendencies — for one generally covets the praise of those whom one admires — would indicate its social basis.

13. The efficiency of praise and commendation in stimulating effort cannot be doubted.[1] Through all stages of education these incentives are probably among the most potent. Their maximal efficiency is, however, strictly conditioned by some very important principles. (1) A nice compromise must be made between too little praise and too much. The latter extreme certainly defeats its own purpose by giving the child an exaggerated opinion of his own ability; as a result, instead of putting forth more effort, he is apt to put forth less. (2) Praise must always be justified by the effort that calls it forth. While it is permissible to praise a dull child for work that could not be accepted from a more capable pupil, it would be bad practice to praise a bright pupil for work that may be beyond anything that his duller fellow could accomplish, but which still has cost him (the brighter pupil) only a minimal effort. (3) Indiscriminate praise or mere flattery will unerringly be detected by pupils, and the most deplor-

[1] "To be in disgrace with its parents ought to be for the child the heaviest penalty. To have their favor should be its highest reward." — FELIX ADLER: "Punishment of Children," in *Journal of Education* (Boston), 1906, vol. lxiii, p. 481.

able consequences will, in all probability, be the result. (4) Even justifiable praise, if carried too far or continued too long, may lead the pupil into the very unfortunate attitude of thinking that everything which he does well must meet with a commendatory reception, — a mistake of which he will certainly have to disabuse his mind when he leaves school and faces the problems of real life. There are not a few men and women in the world who can trace their failure to the fact that the praise with which effort was rewarded in childhood, and especially during school life, was not forthcoming when they began their real work. As a consequence, they become depressed and discouraged, sour and morose, and such an attitude is fatal to success.

It may be concluded that, in the early stages of education, praise should be neither begrudged nor lavished. As the child develops, it is only superlatively good work that should be highly commended. It is only through some such plan as this that praise can be made an effective and safe incentive. Under such conditions it becomes, perhaps, the most effective of all incentives. The desire to "win recognition" is the driving force that is back of most of the best work that is done in the world. Nothing more specific than the above principles can be laid down as governing the operation of this incentive in the schoolroom, but its basic significance cannot be overestimated.

14. (2) *Pupils' Pride in the Good Name of the School.* In the writer's opinion one of the most powerful incentives

to effort on the part of pupils is the pride that they may be led to take in the good name and high standing of the school. This incentive operates most effectively in the large cities where there is a distinct and recognized rivalry between different schools, and where the interchange of visits among teachers of different schools is a common practice. In such cases the best schools receive the greatest number of visitors, and the presence of visitors never ceases to have a stimulating effect upon the work of the pupils. In a Chicago school, for example, over two thousand visitors were registered in a single year. They were attracted by the excellence of the work done in the school, but there is no doubt that the benefit was mutual, — that the fact of constant inspection acted reflexly in stimulating pupils to greater effort and in building up an *esprit de corps* that must mean much to the school's efficiency.

A danger lurks, of course, in the operation of this incentive, as danger always lurks in the operation of any incentive. When a school becomes a "show" school, the spectacular features of school work are more than apt to be overestimated and overemphasized. The pupils, too, may acquire an exaggerated opinion of their own abilities. Under a wise principal, however, — and only a wise principal can establish a permanent reputation for his school, — these dangers will be recognized and counteracted.

In the smaller systems of schools the efficiency of this incentive will be somewhat diminished because of the lack of rivalry; but in all schools visiting should be

encouraged, and especially the visiting of teachers to one another's rooms. Where the population is relatively dense and neighboring towns are easily accessible, there should be frequent interchange of visits among the various corps. The value of this policy is by no means limited to the stimulating effect that these visits have upon the pupils. They serve in no less degree to stimulate the teachers by bringing them in contact with the actual work of others who are meeting and solving the same problems.[1]

15. The value of *school exhibits* in the creating of an *esprit de corps* is also great, although probably less than that which accrues to the visiting of schools. The danger lies in the fact that the school exhibit places a premium upon "show" work of a specific sort, — "showy" results. The time of the pupils is apt to be given in undue proportion to the preparation of the exhibits. The really important part of school work — the daily routine — is thereby broken up, and the more intangible results of this routine receive no adequate recognition. Where the regular work forms the exhibit, as it does in school visiting and inspection, the routine itself becomes the important thing. Nevertheless, school exhibits at county and state fairs, and at national expositions, have a certain value and may be profitably used as incentives under conditions that render visiting and inspection impracticable.

16. (*c*) *Ideals as Incentives.* While the distinction be-

[1] Cf. some valuable suggestions on this matter in Dutton: *School Management*, pp. 37 ff.

tween an ideal and the incentives that have just been discussed cannot be closely drawn, there is a real distinction which needs to be recognized and emphasized. The latter depend upon the idea of an end to be reached in the somewhat immediate future. If effort is put forth, one may escape a punishment, or procure a reward, or be "promoted," or increase the respect in which the school is held. Unless the effort led to the fulfillment of the promise held forth by the incentive, the idea of the end would soon cease to be effective.

An ideal, however, stands upon a higher plane. One puts forth effort, — one performs a task, does something that one does not wish to do, — not because the putting forth of the effort will necessarily lead to the desired end, but because the effort is demanded by an ideal, and not to put forth the effort would mean infidelity to the ideal involved. When one works from a sense of duty, from a sense of self-respect, from an appreciation of the glory of work in itself and of the ignominy of idleness, — when one puts forth effort under any of these conditions, even though the desires of the moment are in another direction, — the operating force is an ideal.

17. The psychology of ideals is, as yet, a dark chapter in the science of mind, but there can be no doubt that an ideal is a highly evolved product, in the development of which the incentives named above must play an important part. Neither can one doubt that the all-important task of the school is to develop in its pupils some of the ideals that have just been referred to. The danger of an educa-

tional policy that lays too much stress upon incentives of the lower orders is that the stern disciplines of duty, self-respect, and self-sacrificing effort find no place in the system. The time should certainly come in the school life of every pupil when tasks can be assigned without bringing vividly before him a definite end that the performance of the task may bring about; when merely from the "sense" of duty the necessary effort will be forthcoming without involving the questions of Why? or Wherefore? Is it interesting? What good is it going to do me? As the author of the "Message to Garcia" clearly points out, the lack of ability to do something, the reasons and details and *modus operandi* of which are not thoroughly explained and made clear beforehand, is one of the prime causes of social inefficiency. One would certainly not argue for an educational policy that should make the blind obedience to authority its sole and only end; but between this extreme and that which is deliberately encouraged by contemporary educational theory, and which disapproves explicitly of setting tasks for which the pupil can see no reason, there is plenty of room for a sane compromise.

The important principle in school practice is this: *Effective ideals derive the greater part of their power from the specific habits that have been developed during the formative period of life.* The ideal of duty grows out of the specific habits of obedience, the ideal of work out of the specific habits of industry, and so on. These habits may be initiated by the application of the various incentives named above, and then, in the later periods of the pupil's

school life, the habits should, in turn, be generalized on the basis of ideals.

REFERENCES. — White: *School Management*, pp. 130–188; Seeley: *A New School Management*, ch. xiii; Roark: *Economy in Education*, pp. 55–58; Dutton: *School Management*, ch. viii; Kellogg: *School Management*, pp. 36–50; Kirkpatrick: *Fundamentals of Child Study*, chs. xi, xii; Thorndike: *Principles of Teaching*, ch. v.

CHAPTER XIII

The Technique of Class Instruction

1. Although a discussion of methods of teaching is not germane to the purpose of this book, there are certain principles and devices of method that have to do specifically with the effective treatment of children in the mass; these, it is clear, must claim attention from the standpoint of classroom management. It is obvious to any one familiar with public school work that no small amount of waste is involved through lack of an adequate technique of class instruction. Principles of method are, as a rule, derived from broader psychological principles, which, in turn, rest upon a study of the individual mind. While such principles are, in general, valid in application to a group of individual pupils, the fact of grouping introduces some modifying factors, and the operation of these factors necessarily makes the treatment of the group somewhat different from what the treatment of a single individual would be.

2. The unique problem of class instruction is to secure the attention of *all* pupils to the matter in hand, and to keep all of the pupils up to practically the same level of attainment in spite of individual differences in previous attainment and capacity for further growth. These difficulties are augmented by the American method of classroom organ-

ization whereby two or more distinct groups or classes are often placed in the same room and under the instruction of a single teacher. This plan requires that the members of each class work independently of the teacher for at least half of the time that they spend in the classroom. Thus, while the difficulties of securing attention from all pupils during the periods of direct instruction are not slight, the addition of independent work will multiply the opportunities for wasting time and misdirecting energy, and will render still more difficult the task of securing uniform and maximally good results from all pupils.

3. The first concern of classroom management with method of instruction has, therefore, to do with this problem: How may the teacher make effective that part of the class work which is necessarily more or less unsupervised? In more definite terms this question becomes the problem of the study period: How may the independent work of the pupils during their study periods be made effective?

The presence of two or more classes in the same room, which is so common in our schools, is probably one cause of the extent to which text-books have come to be employed as media of instruction. The text-book, indeed, is the easiest solution of the problem of educating children in the mass. It makes possible the systematic assignment of seat work by providing each pupil with the same task. It relieves the teacher very largely of the task of mapping out his own courses, and keeps instruction to a definite line. On the other hand, it introduces a dangerous ele-

ment in that it makes for lower standards of scholarship in the teaching profession than would be possible if every teacher were responsible for direct instruction. The system is also defective in that the text-book frequently "tells" too much and leaves very little latitude for the discovery of truth by the pupil. On the whole, however, the text-book system possesses virtues which probably counterbalance its defects, provided, of course, that an adequate technique of using text-books is developed; and in addition to this, the text-book policy is too thoroughly a part of American education to permit of eradication save by some process akin to revolution.[1]

The problem of the present chapter, then, is the elimination of the waste that is involved in the study period, but inasmuch as the use of text-books offers a general solution of the problem, the question may be stated still more specifically: How may text-books be used effectively?

Text-books may be roughly divided into three classes: (*a*) readers; (*b*) manuals or handbooks, such as arithmetic and grammar texts which provide a minimum of facts and principles with a maximum of exercises or problems to be worked out by the pupils; and (*c*) text-books proper, such as geographies, histories, and physiologies, in which the chief aim is the logical and systematic setting forth of facts and principles. The general principles of text-book instruction apply with equal force to each of these classes; they are especially important, however, in the use of the third class.

[1] Cf. a more detailed discussion of this matter in *The Educative Process*, ch. xvii.

4. *The Difficulties of Text-book Instruction.* In using text-books three general difficulties must be overcome: (*a*) The pupil must have some motive for attacking the printed page, or some interest in its contents, if he is to give it the attention that is necessary for the assimilation of the matter presented. Not all of the material presented in text-books is intrinsically interesting to every pupil, nor can it be assumed in every case that the pupil possesses an adequate motive for acquiring something that is not intrinsically interesting. (*b*) The text-book may employ terms the meanings of which are not familiar to the pupils. It may use familiar words in new connections. It may present matter for the apperception of which the pupil lacks an adequate basis of fact. (*c*) Even if these conditions are not operative, the reading of the text will not hold attention so well as would the oral presentation of the same matter. Attention is a rhythmic process, presenting periods or phases which we describe as rise, dominance, and decline.[1] These rhythms follow one another very rapidly, whether the pupils are listening to oral instruction or preparing lessons from text-books. In the former case, however, the character of the instruction "fits in" more or less perfectly with the rhythmic nature of attention. The speaker modulates his voice; he emphasizes some words and minimizes others; he introduces facial expression and gestures: in short, oral instruction pro-

[1] The current controversy among psychologists with regard to the rhythms of attention has, of course, no bearing upon the *fact* of the rhythmic characteristic of the attentive state. It concerns merely the explanation of the rhythms.

vides a greater variety of sensory impressions, and variety of stimulus is one of the most essential conditions of attention. The printed page, on the other hand, is more monotonous in respect of the sensory impressions that it provides; it might be described as presenting its material on the same level continually; while the speaker works in three dimensions, the writer is, as it were, limited to one.

The technique of text-book instruction must, in some manner, counteract or overcome these difficulties. Its problems are (*a*) to give the pupil a motive, or to develop an interest in the material presented; (*b*) to clear up the difficulties of thought and form that would otherwise be insuperable barriers to the assimilation of the material presented; and (*c*) to provide some measure of variety that will serve to relieve the monotony of the printed page—to make the salient and important points stand out clearly.

5. *Divisions of the Text-book Lesson.* (*a*) *The Assignment.* The text-book lesson normally falls into three parts: (*a*) the assignment; (*b*) the study lesson; and (*c*) the recitation. Of these, the first is undoubtedly the most important from the standpoint of the teacher.

The assignment of a lesson should fulfill two functions: (1) It should clear up the insuperable or relatively insuperable difficulties in the way of form. These difficulties may consist of new words, obscure passages, and difficult or unusual constructions. How far the teacher should go in this direction will be a matter of judgment in each specific case. To spend valuable time in explaining the

meaning of words with which the pupils are already familiar is obviously a waste of time and energy. Again, to do too much for the pupil may be to miss a valuable opportunity for encouraging independent effort on his part. Some authorities believe that the teacher should give absolutely no help in the assignment; the pupil, they assert, should solve the difficulties for himself. Let the new words be "looked up" in the dictionary, and let the constructions be worked out independently. But is it always profitable or economical to do this? Are the results gained, for example, in "running down" all new words in the dictionary commensurate with the time and energy expended? Is not the dictionary definition often misleading, and does one not often get meanings from familiar context that are far more valuable than those derived from formal definitions? It is such questions as these that must be met and answered in determining how much to do for the pupil in assigning lessons.[1] In the

[1] It is interesting to note how authorities differ with regard to the use of the dictionary in the lower grades. The Illinois "Course of Study" contains the following recommendations: "By the time the pupil reaches the sixth grade, he should be able to pronounce all the common words at sight. He should be required during the study hour, to look up in the dictionary the pronunciation of all words unfamiliar to him. In Grades V and VI he is taught how to use the dictionary for definitions. . . . He should learn to decide between the meanings of a word to select the meaning that the context calls for. This work is begun in the fifth grade and carried on more independently by the pupil himself in the sixth." (p. 61.) Superintendent R. G. Young of Butte recommends the use of the dictionary in the last half of Grade III. The Portland (Oregon) "Course of Study" prescribes the dictionary for pronunciation in the first half of Grade IV. State Superintendent Carrington of Missouri recommends the dictionary for Grade VI. In the Los

writer's experience the best results have been obtained by carefully explaining all formal difficulties in lessons assigned to the lower grades — through the fourth grade in any case. In the upper grades more reliance is placed upon dictionary work, but even then new terms that are especially important are developed orally.[1]

The technique of developing new words permits numerous variations. In some lessons the subject-matter treated by the text is briefly outlined, the new words being written upon the blackboard and explained through illustrative sentences whenever they come up in this preliminary development of the lesson. In other lessons it will be unnecessary to give an oral development of the subject-matter, and the new words in such cases may be given in sentences that are not directly related to the content of the text. In any case it is much better to give the word in a familiar sentence and ask the pupils to tell its meaning than to write the word upon the blackboard and give a formal definition. In all assignments there should be more or less "give-and-take" between pupils and teacher if the pupils are to follow the development attentively.

Angeles schools it is prescribed for Grade V. Many other authorities make similar recommendations. On the other hand, Principal Chubb warns us not to "overwork the dictionary" in the earlier grades, and Professor S. H. Clark would have the meaning of words gained from context rather than by dictionary definition.

[1] "What is the teacher for? . . . Good pedagogy says, To give such a preview of every subject, of every lesson, as will make the pupil's study effective, as will help him to see relations, and save him from misconceptions. Without the proper preview, a great part of the teacher's work is correcting errors that ought to have been avoided — is requiring the pupil to 'unlearn' what he never ought to have learned. The preview is the 'ounce of prevention' that is worth a whole night occupied in correcting the pupil's written work." — F. H. Hall, in *School News* (Taylorville, Illinois), 1906, vol. xix, p. 338.

6. Formal difficulties are not infrequently due to the fact that pupils fail to notice slight peculiarities of form upon which an important meaning may turn. Thus the "thought" of a paragraph may sometimes depend upon a small word that may be overlooked, or upon the peculiar emphasis that must be given to a certain word. The pupils should, of course, be encouraged to search these things out for themselves; but they will not accomplish this end unless some hint as to the method is given in the assignment.

These unobtrusive peculiarities of form are really the factors that make English spelling so difficult to master. The slight formal difference between "thought" and "though," "saw" and "was," are instances that will be familiar to all teachers in the primary grades. Even more troublesome are the words that are identical in sound, but which have different meanings and different spellings, — "knew" and "new," "deer" and "dear," and the like.

The assignment is consequently at no time more important than in preparing for the spelling lesson. The pupils' attention must be explicitly directed to the minute differences that are apt to cause trouble. This is best done by emphasizing the correct form, without, at the same time, suggesting the mistake that the pupil is likely to make. A very good example of an effective assignment in this respect was recently brought to the writer's attention by an institute instructor. In a spelling lesson for the fourth grade the only word that was apt to cause trouble was "separate." The instructor suggested writing this word slowly upon the blackboard, pausing briefly at the end of the first syllable, — "sep," — then writing the troublesome "a" with bright red crayon, completing the word with white crayon, — "sep*a*rate." Whenever a wrong letter is apt

to be substituted, owing to phonic resemblances, some device like this that will bring the correct letter vividly before the pupils' minds may appropriately find a place in the assignment.

In another fourth-grade spelling lesson the following words were assigned for spelling: close, clothes, brought, thought, carpenter, advantage, devour, pieces, comfortable. The teacher's general method of assignment was to have each word carefully focalized, syllabicated, pronounced, and spelled, first silently and then aloud. In discriminating between homophones, the pupils were required to used the words correctly in sentences. In focalizing the word "clothes," the teacher pointed to the "e" and said, "I want you always to remember to put this letter in." When "brought" and "thought" were under discussion, the teacher asked if the words were alike in any respect. A pupil suggested that they ended in the same way. "Yes," said the teacher, "if we cover up the first two letters of each, they are alike. Then let us remember what these two letters are for each word." Mnemonic devices were used in focalizing "devour" and "pieces." In the former case, the "our" was arbitrarily associated with "dev*our*"; in the latter case, "pie" was associated with "*pie*ces." The pupils were familiar with the spelling of both "our" and "pie." Just how far such mnemonic devices should be employed is an open question, but the results in these instances seemed to justify the practice. In order to test the efficiency of this assignment, the same words were given to the class five days afterward. Eighty per cent of the pupils spelled all of the words correctly; twenty per cent failed on one of the nine words. The same lesson was given to another class of the same age and grade without assignment or study. One pupil spelled eight words correctly; another spelled only one correctly; the average standing of the class in the test was 47 per cent.

7. (2) The second function of the assignment is even more important than the first. It is to develop in the pupil either an interest in the subject-matter of the text, or a motive for attacking the text aggressively. In this connection the first task is to make clear the relation between the forthcoming lesson and those that have preceded, — to "connect up" the new and the old. If this is not done, the text may be comparatively meaningless to the pupil; and his assimilation of the content will, of course, be impossible.

It is at this point that the inductive development lesson, involving the five "formal steps" of the Herbartian pedagogy, has its field of widest application in our American schools. Many teachers who have mastered the theory of the formal steps in their normal school or college work fail to use the inductive method of development in their teaching, because the public school system in which they work is dominated by text-books, and they cannot see how the text-book and the development lesson can go hand in hand. As a matter of fact, the assignment of any text-book lesson in which a new principle is brought out may involve an inductive oral development covering, perhaps, an entire period.

This is clearly seen in the teaching of arithmetic and grammar. In taking up any new principle, such as the division of decimals, or the definition of a preposition, the proper procedure is inductive development, involving (*a*) the preparation (bringing into consciousness the material already mastered upon which the new principle depends); (*b*) the presentation (generally concrete cases involving the new principle); (*c*) the comparison and abstraction (comparing the concrete cases and picking out the common elements); (*d*) the generalization (formulating the common elements in a rule, definition, or

principle); and (*e*) application (showing how the principle applies to new cases).

The following lesson in arithmetic represents an actual assignment given to a ninth-grade class: —

The lesson had for its purpose the development of the principle that, in a right-angled triangle, the square of the hypotenuse equals the sum of the squares of the other two sides. The teacher had prepared a diagram showing a right-angled triangle with squares constructed upon the hypotenuse and the two sides. The perpendicular of the triangle was labeled *AB*, and was three inches in length; the base (*BC*) was four inches in length; the hypotenuse (*AC*) was five inches in length. The diagram was carefully drawn upon a flexible blackboard, which the teacher had rolled up, and which was not displayed to the pupils until the step of preparation had been completed. (Note the value of this small detail of technique in the appeal made to the instinct of curiosity.)

Preparation. The class had been working problems involving the application of square root in determining the side of square when the area is given. Problems of this nature had been assigned for home work, and a few moments at the beginning of the recitation were devoted to a discussion of two problems with which the pupils had found difficulty. By this means the principles governing the extraction of square root were reviewed.

Statement of the Aim. "To-day we shall study another application of square root."

Presentation. The flexible blackboard which has been hanging on the wall is unrolled. The teacher calls the attention of the class to the diagram.

Teacher. "Where did I begin to make this drawing?" (Calling on a certain pupil.)

Pupil. "You drew the triangle first."

T. "What kind of a triangle did I draw?" (Calling on another pupil.)

P. "A right-angled triangle."

T. "We call these two lines (pointing to *AB* and *BC*) the perpendicular and the base. This third line, however, has a name of its own with which you are not familiar. We call this the *hypotenuse*." (Writes the name on the board as she pronounces the word.)

The names are then rapidly reviewed, the teacher pointing to the three lines in rapid succession, and calling upon different pupils, who rise quickly and give the required names.

T. "After drawing the triangle, what did I next do?"

Various pupils volunteer different opinions. Finally one pupil replies: —

"You made a square with the perpendicular for one side."

T. "Yes; and how long is the perpendicular?"

P. (After measuring it): "Three inches."

T. "How shall I find the area of the square?" (Calling on a particular pupil by name, as is the invariable custom of most good teachers in work of this sort.)

P. "Multiply the length by the breadth. The area of this square would be nine square inches."

T. "Right; I shall put '9 square inches' in the center of the square. How many little squares each containing one square inch are there in the large square?"

P. "Nine."

The other squares are then treated in the same way, and with little less detail. The terms are reviewed in each instance, and the answers are obtained from different pupils in every case.

T. "Count the squares upon this side." (Pointing to the base.) "And upon this side?" (Pointing to the perpendicular.) "How many altogether?"

P. "Twenty-five squares."

Comparison and Abstraction. *T.* "But this is the same as the number that I had upon the hypotenuse. Now if I knew that there were twenty-five squares on the hypotenuse, and

nine squares on the perpendicular, how could I find how many would be on the base?"

P. "You could subtract nine squares from twenty-five squares, and you would know that there were sixteen squares on the base."

T. "And if I knew that there were twenty-five squares on the hypotenuse and sixteen on the base, how could I find the number on the perpendicular?"

P. "You could subtract sixteen from twenty-five. You would have nine squares on the base."

T. "What is the square of three?"

P. "Nine."

T. "What is the square of four?"

P. "Sixteen."

T. "What is the sum of the squares?"

P. "Twenty-five."

T. "What is the square root of twenty-five?"

P. "Five."

T. "What is the square of five?"

P. "Twenty-five."

T. "What is the square of three?"

P. "Nine."

T. "What is the difference of the squares?"

P. "Sixteen."

The same questions are asked with respect to the difference between twenty-five and sixteen. Different pupils answer the different questions at the request of the teacher. The teacher then reviews the facts very briefly with the pupils.

Generalization. *T.* "How, then, may we find the hypotenuse if we know the base and perpendicular?"

P. "Square the two sides, add, and extract the square root."

T. "How may we find one side if we know the hypotenuse and the other side?"

P. "Square the hypotenuse and the side you know, subtract the square of the side you know from the square of the hypotenuse, and extract the square root."

Other pupils make similar formulations until a general rule is obtained that covers all cases.

Application. *T.* "Let us see what application we can make of this." An example is read by the teacher from the book: —

"Base, 160; perpendicular, 168; hypotenuse?"

A pupil draws a triangle that will approximately represent these conditions.

T. "I want some one to put the figures where they belong on this triangle." Several pupils volunteer; one is selected and does the work correctly.

T. (To another pupil): "Right or wrong?"

P. "Right."

T. "Why?"

The pupil quickly explains why the arrangement is correct.

Two other problems are similarly diagramed and the diagrams labeled, the teacher requiring criticisms in each instance and insisting upon the reasons. The first problem is then solved. Then others that involve the reverse process are taken up. A more concrete problem is next considered: —

"A boy is flying a kite. The string is one hundred feet long. The kite is directly above a point eighty feet from where the boy is standing. How high is the kite above the ground?"

T. (Calling on a pupil): "Put upon the board a cross standing for the boy."

"Put upon the board a cross standing for the kite."

"For the point directly under the kite."

"Draw a line corresponding to the string of the kite."

"To the line connecting the kite and the point on the ground immediately beneath it."

"To the line connecting this point with the boy."

"Place the numbers where they belong on the diagram."

Different pupils do these different things as the questions are asked.

T. "Now how shall I solve this problem?"

The solution is sketched by a pupil, although the operations are not actually made.

One or two other problems, taken from the book, are diagramed in a similar manner, and the teacher then assigns several additional problems for home work.

The lesson, of which the above account is practically an exact transcript, occupied forty minutes, and is a typical example of the inductive development lesson functioning as an assignment in arithmetic.

8. In some cases a direct interest may be aroused in the subject-matter through the skillful stimulation of the instinct of curiosity. Many lessons which the pupil would otherwise attack listlessly and ineffectively may be so artfully introduced through an anecdote or some personal allusion that the pupils will wish to read the material as quickly as possible.

An example of such an assignment is represented by the following incident which was related to the writer by one of the ablest schoolmen in the country. In teaching a beginning class in United States history, he had been in the habit of making rather elaborate assignments, but when the topic of Arnold's treason was reached, he changed his policy, and assigned the lesson somewhat as follows: "The next few pages of the book tell about a very mean man. I do not think that I have ever heard of another man so mean and contemptible as he was. I don't know that it will pay us to spend very much time on this man; but, after all, it was a rather pathetic case, and

you might read it over this evening." The teacher characterized the next day's recitation as the best that he had ever secured from any class in history.

Assignments of this type will probably not be made very frequently, for the reason that opportunities for stimulating curiosity do not often occur. A more extended use can be made, however, of an acquired interest that is closely related to instinctive curiosity. Pupils may be led to infer what events might happen under certain conditions and then sent to the text-books to verify or disprove their inferences.

This type of assignment involves what the writer has termed the "deductive development lesson,"[1] and is perhaps most frequently to be applied in geography and history. In the former subject, for example, the assignment of a lesson on England would consist of a map study of England. From this study the pupils would be led to infer such facts as the climate, productions, occupations of the people, etc. Having made these inferences, the text-books could be consulted in order to determine how close the pupils had come to the real facts. This general method is also important in that it gives wide scope for the effective employment of reference books other than the regular text. In history, pupils may be encouraged to make inferences as to the next move that an army would make, or the next step that a statesman would take in carrying out a given policy, and then referred to the text for verification of the inference. Care must, of course, be taken to prevent such exercises from lapsing into mere guesswork; properly handled, however, they furnish an incentive for effective study that could hardly be gained in any other way.

[1] Cf. *The Educative Process*, ch. xx.

9. In assigning selections of literature for reading it is frequently necessary to give a general account of the "setting" of the selection. Thus the selection may be taken from a more extended work, or it may have reference to some historical event. In either case, the reading will be rendered more intelligible if the "setting" is described in some detail.

In a reader used in the fifth grade, Lincoln's Gettysburg address is given. The writer attempted to have fifth-grade pupils read this under the ordinary method of assignment, "Take your readers, turn to page 65, and study this lesson." He found the results so inadequate that he had the pupils close their books, and then he told them the story of Gettysburg, making as clear as possible the situation between the North and the South, showing the decisive character of the battle, and dwelling briefly upon the tremendous loss of life that was involved, and the general significance of the victory. All this was necessary in order to show why an occasion had arisen for Lincoln's address. Then he went through the text, carefully explaining the allusions and assigning the reading for the next lesson. The pupils worked at it during the study period and came to the recitation well prepared. Since that time he has made it a practice always to have masterpieces of literature carefully assigned and frequently read aloud to the class before setting the pupils to work upon them independently.[1]

10. The assignment very infrequently takes the form of a formal lecture, covering points developed in the text. This procedure would generally be regarded in elementary

[1] The reading of a literary masterpiece to the pupils before assigning it for study is recommended by Chubb. Cf. *Teaching of English* pp. 99 ff.

education as "soft pedagogy," although, strange to say, it is perhaps the most common method of teaching in the colleges and universities, where many introductory courses are nothing more nor less than lectures on a text-book which is in the students' hands, and which they cover in parallel readings. In elementary education such a procedure is eminently in place in introducing the more difficult conceptions of physical geography, where objective demonstration through globes, tellurians, etc., is essential to the pupils' understanding of the subject. After a demonstration of this sort, accompanied by the descriptive "lecture," the pupil is given the text-book and assigned the lesson which treats of the same principles.

11. In general, it may be concluded that much of the time which young pupils waste in attempting to "get lessons" out of text-books could be saved and turned to educative use if the lessons were skillfully and properly assigned. The careful assignment offers a safe compromise between the German method of oral instruction and the American method of book instruction; it provides a field of application for the inductive and deductive development lessons; in short, it is the field in which the skillful and efficient teacher does most of his real teaching or instructing. It is not without its dangers; subject-matter may possibly be made too easy for the pupil; but, in view of the inadequate results in the common use of text-books, it would appear that the danger line is far in the distance. Opponents of elaborate assignments tell us that the pupil gains strength by overcoming difficulties, and that he should

attack the printed page without help and get out of it what he can. And yet every teacher of experience in elementary school work will testify that pupils who are treated by this method almost invariably come to recitation unprepared, and all will agree that it is unjust to hold pupils responsible for something that must necessarily be vague, hazy, and obscure to them. The natural result is that the teacher who does not teach in the assignment is forced to teach in the recitation. He must go over the lesson at that time, clearing up the points that should have been cleared up before the pupils attacked the text. Under these conditions, pupils soon come to know that, if they do not master the text, the teacher will recite it for them, and the most important stimulus to effort — the idea of responsibility for results — is eliminated. It is this condition that makes text-book work on the whole so inadequate. With a careful assignment, however, pupils can be held rigidly responsible for the mastery of the text, and the recitation becomes a word with a meaning.

12. (*b*) *The Study Lesson.* The application of the pupils in their period of seat work tests the efficiency of the assignment. One of the surest indices of a teacher's ability is the diligence of the study class. Indeed, the expert and experienced supervisor will always look first at the study class. If these pupils are working vigorously and with evident efficiency, he turns his attention to the class that is reciting. The prime test of a teacher is not the manner in which he conducts a recitation, but the growth that his pupils make in ability to work efficiently without supervision.

13. *The Technique of the Study Lesson.* However skillful the assignment may be, it should not be entirely depended upon to secure the application of the pupils during the study period. It was said above that the main difficulty in holding the attention to the printed page is the lack of sensory variety in the material which the page presents. The technique of the study lesson must, therefore, do something to counteract this difficulty — it must introduce variety of sensory stimulus.

(1) *Study Questions.* When the pupil first begins to use text-books, it is well to furnish study questions that will aid him during the study period to pick out the salient points treated in the text. There are two types of such questions: these may be termed for convenience the "fact" questions and the "thought" questions. Certain points of the text may be selected and questions asked which can be answered by reference to these points. Thus the central thought of each paragraph may be indicated by a question. If the paragraph is long and involved, several subordinate questions may be included to cover the details. Questions of the "thought" type aim to secure the original reaction of the pupils upon points that may later serve as centers for discussion. In history, for example, the pupil may be asked to form an estimate of a certain character, or to tell why a certain policy would be good or bad. In geography, he may be encouraged to think out the reasons for the facts presented in the text, why New York has become a large city, why New Orleans is an important shipping point, etc.

The following suggestions, taken from the Illinois "Course of Study," indicate questions that may be used in the study of the reading lesson: "In the preparation for the lesson, let the teacher assign definite questions, having a care that her questions are suggestive enough and not too suggestive. Suggestions: For enlarging the pupil's vocabulary, for giving him fresh thoughts and a feeling for literary expression, the teacher may ask questions that require the pupil to answer in the words of the author; as, he may be asked to give the words and phrases that describe Rip Van Winkle, Miles Standish, or the characters in *Snow-Bound*, or that make a scene real and beautiful to him. How does he know that Sleepy Hollow is a sleepy place? Just what things make Ichabod Crane exultant as he looks over the Van Tassel farm? Let him select the pictures in the lesson and tell in detail what he sees in them. . . . He may also be asked to pick out the comparisons applied to the characters and to the objects in nature and explain the point of comparison. Thus the pupil may early come to a conscious appreciation of truthful and effective expression." (pp. 60–61.)

The writer has found by actual test that it is much better to have the questions placed upon the blackboard than to have them printed at the end of the lessons in the text. If the texts furnish suggestive questions or topics, the teacher is advised to copy them upon the blackboard for use during the study period. The alternation of attention between the printed page and the blackboard tends, undoubtedly, to introduce a superficial variety of stimulus and movement that helps in the concentration of attention. Whatever the explanation, however, there is no doubt that the blackboard questions hold the attention more adequately.

After the pupils have gained some skill in studying the text by means of suggestive questions, they may be encouraged to make out lists of questions which shall embody the salient points of the text. This is an extremely serviceable device, for it requires that the pupil study the text carefully in order to make out intelligent questions. Occasionally, a pupil having a good list may be permitted to "quiz" the class.

14. (2) *Study Topics.* Study questions will at first be detailed and concrete; they will gradually become more and more condensed and schematic as the pupil becomes more and more familiar with their use, until finally they develop into mere statements of the topics. If the pupils are accustomed to the logical arrangement of questions, — main questions, subordinate questions, etc., — the logical arrangement of topics will not trouble them. Gradually, also, they may be led to "skeletonize" the lessons for themselves, at first writing out the topics in logical order and later gaining the ability to hold the topics in mind as they proceed with their reading. When the pupils have gained this ability, they have, of course, acquired the art of study. Proceeding in this systematic way from detailed and concrete questions to schematic questions, then to topics, the pupil can hardly fail to acquire a standard method of attacking the printed page. It has been the writer's experience that, unless this matter is taken up explicitly and systematically, the progress of pupils in all text-book work will be slow and halting.[1]

[1] "There is a definite pedagogical problem in teaching to study . . . but the problem is being largely neglected in current educational practice. . . . Pupils should be taught to study from the time they enter the pri-

15. *Written Work in the Study Period.* As a general rule, the work of the study period in text-book subjects should be so organized as to demand a minimum of written work from the pupil. The pupil should be encouraged to get on without the aid of pen or pencil. This proposal will seem quite out of harmony with existing practice, for almost every study period in our public schools is dominated by the pencil and paper. The grievous error of this practice lies in the inadequate writing habits that it involves. It is generally agreed that our pupils do far too much writing, and especially too much careless writing. The result is that the formation of good habits in this regard is almost an impossibility. The practice of holding the attention of the pupils by demanding writing is also to be criticised because it fails to develop ideals of silent study — concentration upon the "thought" of the text, ability to hold in mind a long series of topics without resorting to pen or pencil, ability to work without objective aids.

16. (*c*) *The Recitation Lesson.* The work of the recitation should test both the efficiency of the study period and the efficiency of the assignment. In order to be maximally effective, it should be dominated by this fundamental precept: *Hold the pupil rigidly responsible in the recitation for whatever tasks were set for him in the assign-*

mary, but more and more attention should be given to the matter as they advance upward in the grades, and more attention should be given to it in the high school and college. Here the 'how' to study becomes at least of as much importance as the 'what.'" — W. C. RUEDIGER: "How to Study," in *Inter-Mountain Educator*, 1906, vol. i, p. 161.

ment. Unless this principle is adhered to strictly, the most skillful assignments and the most artful devices for the study period will be a waste of time and energy.

17. The recitation usually takes one or another of two forms: (1) the *question-and-answer* recitation; (2) the *topical* recitation. The former is the simpler in that the pupil is held responsible for separate facts, not for holding in mind the relations that bind separate facts together. All text-book recitations are necessarily of the question-and-answer type at the outset, the questions asked being detailed and concrete. As the pupil gains in proficiency, however, the questions (which correspond closely to the study questions discussed above) become more and more comprehensive, demanding that the pupil hold in mind a larger and larger number of facts, and express them in a connected and coherent fashion. Finally the recitation passes over to the topical form, in which the mere statement of the topic by the teacher initiates a full and complete discussion of that topic by the pupil. This type of recitation can be required in all grades above the fifth (and in some recitations in the earlier grades), provided that the pupils have had an adequate training in the art of study.

One of the tests of a teacher's efficiency in the upper grades is the freedom of his recitation work from "pumping questions." In many recitations one will hear a series of questions like the following: Who discovered America? When? Of what country was Columbus a native? What country aided him in discovering America? What difficulty did he have with his

sailors? etc. Each of these questions can be answered either by a single word or by a brief sentence. They require a minimum of mental activity on the part of the pupils. If one hears such questions as these in an eighth-grade class, one may safely infer that the teacher is not thoroughly alive to the possibilities of recitation work. It would be much better to ask a single question like this: "Give a brief account of the discovery of America." If pupils have been inadequately trained, it may be necessary to indicate in greater detail the points to be included in the discussion: "Give a brief account of the discovery of America, telling who made the discovery, the country of which this man was a native, the country that sent him out, and the troubles that he encountered." The pupil is then required to hold the various points in mind, and to express himself coherently.

18. In order to secure the attention of all pupils to every topic it is well to observe some simple rules regarding the conduct of the recitation: (1) State the topic or ask the question first, then wait a short time before calling upon a pupil to recite. (2) Avoid calling upon pupils in any definite and uniform order; be sure that *all* pupils think out an answer to every question or a statement for every topic. (3) Occasionally interrupt a pupil before he has completed a recitation and ask another to continue the discussion from that point. (4) Encourage by some form of commendation all exceptionally good efforts on the part of pupils to make complete and coherent statements; discourage in some effective manner all "scamped" or inadequate work. (5) Do not help pupils in the recitation; if the entire class is obscure upon the point at issue,

reassign it with a more complete explanation, holding the pupils responsible for its mastery at the next recitation; if a single pupil is obscure upon any given point, do not take class time to help him out; rather provide a period when he can be given individual aid.

The last precept involves individual instruction, which will be more fully discussed in the following chapter. It is sufficient here to note that a great deal of time is wasted in recitations by redeveloping some point or principle about which one pupil is uncertain. The other pupils, understanding the principle, have no incentive for following the discussion. The writer has observed a recitation in which ten minutes were spent in clearing up a point that one pupil and only one had failed to grasp in the previous assignment. There were twenty pupils in the class, not one of whom was attentive after the first few minutes of the redevelopment. At least one hundred minutes in the aggregate were thus wasted. The only way in which to eliminate such waste is to provide some time for individual work with backward pupils.

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CHAPTER XIV

The "Batavia System" of Class-individual Instruction

1. The class system, which has come to dominate formal education, possesses certain advantages over an individual system of instruction. (*a*) It is more economical in its maintenance (and this is, of course, the chief reason for its extensive use). (*b*) It involves in itself a certain educative influence in that it teaches the subordination of individual impulses to the welfare of the class as a whole. (*c*) Its greatest advantage, however, lies in the stimulus that is gained from competition, emulation, and the group interests.

On the other hand, the class system involves some disadvantages that may, under some conditions, quite overbalance its desirable qualities. (*a*) It may lose sight entirely of individual differences, becoming a "machine" in the worst sense of the term. (*b*) It tends to impart instruction with reference to an ideal "average child," who may have no existence in reality. (*c*) It may involve conditions that are injurious to the health of the weaker pupils in the worry and overstrain that result from an attempt to keep "up to grade." (*d*) It undoubtedly tends to discourage a certain proportion of pupils and to keep them from continuing with the work of the school.

2. It is clear, therefore, that some form of compromise between individual and class instruction is essential to the best work of the school. Furthermore, it is clear that any readjustment, to be practicable, must not be too radical. The existing machinery of the educational system must be employed, but some steps should be taken to render its operation more efficient. A system of pure individual instruction is obviously impracticable and is also to be condemned because it would eliminate the stimulus that comes with group activity.

It is hardly necessary to say that formal education began with what we now call individual instruction. As late as 1843, according to Landon, there were still 5844 primary schools in France organized in this way: "The master conducted and taught the whole school himself, if of moderate size, or a division where the school was too large for single management. He remained at his desk, or rostrum, and called up the pupils, one by one, to repeat the lesson learned, or to receive any help or explanation needed. . . . The teaching or questioning was directed to each pupil alone, the rest of the children not participating in any way in the work. In time a modification was introduced in most cases, a whole class being called up and the pupils taken in turn. Even here, however, there was no 'class teaching,' as we understand the term." [1]

3. What is now known as the "Batavia system" of "class-individual" instruction is perhaps the most successful method yet devised of effecting a compromise between the individual and class methods. In essence,

[1] J. Landon: *School Management*, Boston, 1884, p. 119.

this system aims to preserve the stimulus which comes from group-instruction, and, at the same time, to provide *explicitly and systematically* for whatever extra instruction the weaker members of the class may need to keep them abreast of the brighter members.

The Batavia system owes its origin to John Kennedy, superintendent of the public schools of Batavia, a small city in western New York. The "discovery" of the system was in one sense the result of an accident. The older school buildings of Batavia were constructed with classrooms capable of seating from sixty to seventy pupils. In 1898 it was thought necessary to employ an additional teacher in order to accommodate an increase in the number of pupils. The rooms, however, were all occupied, and it did not seem advisable at the time to construct a new building. Mr. Kennedy proposed placing the additional teacher in one of the larger classrooms, and then filling this classroom to the limit of its seating capacity. He suggested that one of the teachers could take charge of the class work, while the other could look after the needs of individual pupils. The suggestion was adopted as an experiment. The results were so unexpectedly good, that other large classrooms were supplied with two teachers under the same division of labor. A marked improvement was noted in all of these cases, and soon the system of "class-individual" instruction was made general throughout the city.

4. The virtues of the Batavia system may be summarized as follows: (1) It makes individual instruction a definite part of the regular school work. In nearly every school individual instruction finds a place, but not a definite place; the teacher attempts to "work up" the weaker pupils after school, or at such moments as he may snatch

during the regular school session. The Batavia system makes individual instruction coördinate in importance with class instruction, assigning it a definite place upon the daily program, and subjecting it to a systematic and orderly treatment.

(2) The Batavia system provides that individual instruction shall be given by teachers who are just as competent as those giving class instruction. In other words, the work of individual instruction is not given over to novices or apprentices. It is not intrusted to pupil-teachers or monitors as in the case of the Bell-Lancaster system, which had so wide a vogue in England a century ago.

(3) The Batavia system requires the development of a technique of individual instruction which differs in many respects from the technique of class instruction, and which is absolutely necessary to the success of the system. This special technique is governed by two general principles: (*a*) The initiative in individual instruction must always be taken by the teacher; that is, the pupil is not permitted to ask for aid, but the teacher must discover his weakness and proffer aid. (*b*) All individual instruction must be given by the development method; that is, a weak pupil is strengthened by helping him to help himself; direct instruction is forbidden.

5. These principles are intended to safeguard individual instruction against the *danger* by which it is very obviously menaced; namely, that the weaker pupils will be still further weakened by a "coaching" process that does nothing whatsoever for their real education. The Batavia

system without the check of some such principles as these would be apt to degenerate into a most pernicious form of "soft pedagogy." In the Batavia schools this tendency is still further checked by a rigid examination system. Tests are prepared by the superintendent at the close of each term, and all promotions are made upon the basis of these tests. This examination system operates through all the grades. It should also be remarked that the "form" work is strongly emphasized in the Batavia schools; reading, spelling, arithmetic, and formal language work are all undertaken very strenuously and with noticeably good results. This policy would also tend to check any weakening or "softening" influences that may be inherent in individual instruction.

6. The main argument in favor of the system, however, lies in the fact that it actually accomplishes (in the Batavia schools, at least) that which it sets out to accomplish. The "backward pupil" is eliminated, not by casting him out of school, but by developing him up to the level of the brighter pupils. Some good results may be found in almost every school, but in the Batavia schools the results are *uniformly* good with *all pupils*. Every pupil, so far as the visitor can learn, is either "up to grade" or practically so, for the moment that he begins to lose ground, the individual recitation period brings him up. At the present time, even under the rigid system of final examinations, there are practically no failures in promotion. Superintendent Kennedy also asserts that a large number of pupils are able to do two years' work in one, and that, in at least two

instances, an entire class has done the work of the seventh and eighth grades in a single year.

Other evidences of the success of the system are the high per cent of attendance, the large number of pupils who remain in school through the full course, the large proportion of boys in the high school (over fifty per cent), and the freedom of the pupils and teachers from nervous disorders — a condition that is attributed to the fact that the system largely eliminates the "worry" that is so often involved in the common system.

7. *Applicability of the Batavia System.* To apply the Batavia system to the work of any school, it is necessary to take but two steps: (1) provide definite periods for individual instruction; (2) impart individual instruction according to the principles named above. On the surface, the first condition may perhaps seem the more difficult of fulfillment; as a matter of fact, it is by far the simpler of the two. Contrary to general belief, the Batavia system does not demand the presence of two teachers in every classroom. The general method can be applied in one-teacher rooms, and is so applied in more than half of the Batavia classrooms.

The application of the system to one-teacher rooms is made possible by what may be termed a "doubly-alternating" program. For example, if the regular program provides for five recitation periods each week in geography, each alternate recitation period is given over to the individual instruction of the weaker members of the class. If the recitation period to-day is given over to class work, the

recitation period to-morrow will be given over to individual instruction; the pupils requiring individual instruction are called to the teacher's desk one at a time, the other pupils meanwhile working independently at their seats as they would during the study period.

The *double* alternation is provided in this way: if the geography recitation period of to-day is given over to individual work, the following recitation period of to-day, say in arithmetic, will be given over to class work; that is, under normal conditions, there will not be two individual periods in immediate succession.

The illustrative program given on page 63 may be arranged for individual work as follows. (The morning periods alone are given here.)

Period	Duration	"A" Class	"B" Class
9:00– 9:10	10	Opening exercises	Opening exercises
9:10– 9:20	10	S. spelling	S. spelling
9:20– 9:30	10	R. spelling (indiv.)	R. spelling (indiv.)
9:30– 9:55	25	R. reading (class)	S. arithmetic
9:55–10:15	20	S. arithmetic	R. arithmetic (class)
10:15–10:30	15	Writing	Writing
10:30–10:45	15	Recess	Recess
10:45–11:10	25	R. arithmetic (indiv.)	S. reading
11:10–11:30	20	S. geography	R. reading (indiv.)
11:30–11:50	20	R. geography (class)	S. geography
11:50–12:00	10	Physical culture	Physical culture

"Indiv.," individual recitation; "class," class recitation; "S," study period; "R," recitation period.

On the following day the subjects designated as individual recitation periods in the above program will be devoted to class recitations, and *vice versa*.

Under this plan of double alternation the system may be applied to the work of any classroom, irrespective of the number of classes in the room or of the number of recitation periods of the day. Thus it is just as applicable to the ungraded rural school as to the graded city school.

It would, of course, be possible to introduce other forms of alternation; thus every third recitation period may be given over to individual work, or every fifth period. As long as a *definite school period is explicitly assigned for individual work*, the essential condition of the Batavia system has been fulfilled. The results in Batavia would seem to indicate, however, that the best results are obtained where the recitation periods are equally divided between class and individual recitations.

8. One of the most serious drawbacks to the application of the system in one-teacher classrooms is the difficulty of supplying independent work for the pupils who are not undergoing individual instruction. It will be noted that the difficulties of the study period (already serious enough) are greatly augmented by this system. The need, therefore, of careful assignments of seat work for the majority of the class is paramount, and for this reason a well-developed technique of class instruction, especially with reference to the assignment, is obviously of great importance in the application of the Batavia system. Care must also be taken not to overemphasize written work,

which will be the line of least resistance in supplying independent tasks.

The following suggestions have been made by Superintendent Kennedy [1] as possible guides for teachers who introduce his system into their schools: —

"(1) Do not give individual instruction on forthcoming lessons. Train the children to be self-reliant lesson getters.

"(2) Do not tell the child anything, but see that he knows it. . . . The danger of individual teaching is that it may be treated as a labor-saving device.

"(3) Do not do anything for the child but see that he does it. Individual teaching is not to level mountains. It is to make brave and capable mountain climbers. Correct individual teaching treats the difficulty (or mountain) as an educational opportunity."

These restrictions should be understood as applying solely to individual instruction, and stand as safeguards against the dangers of such instruction. They should not be interpreted to mean that the teacher is to do no direct teaching, but rather that this would best be confined to class work. The danger in individual instruction is to give too much help; the danger in class instruction is to give too little — especially in the assignment of independent work.

The following suggestions are taken from a circular issued by a Minnesota superintendent who recently introduced the Batavia system into his schools: —

"Keep the guiding aims steadily in view.

"See that assignments of work for the class in the individual period are clear and definite. Assignments of work should always provide for methods of work as well as amount.

"Use the individual period to give the pupil a grasp of principles, not to aid him in getting his next lesson.

[1] J. Kennedy, in *Educational Work*, 1906, vol. ii, p. 49.

"Make notes in the recitation period, and, at other times, of help needed. Make notes at other times as to help given and pupils' characteristics.

"Use the individual instruction period to bring into line pupils who have been absent.

"Do not hurry in attempting to help too many pupils in one period.

"Make the plan for yourself a means of growth in power and not merely the adoption of a device." [1]

9. It may be concluded that, while the Batavia system is still in the experimental stage, it promises to effect a successful compromise between class and individual instruction, preserving the valuable features of each and eliminating some of the disadvantages of both. It must, however, be applied with a full recognition of its pitfalls. It requires teachers of skill and scholarship for its effective application. It demands the elaboration of a special technique of individual instruction, and requires that this be combined with an equally effective and specialized technique of class instruction. It may eliminate some of the worry incidental to the class system, but it must not be looked upon as a "royal road to learning," nor must it be thought of as eliminating in any degree the struggle and effort that are always essential to mental growth. Its value will be greatest in those schools that are dominated by high ideals of scholarship; and least in schools that are already committed to "soft pedagogy."

[1] S. Smyser: "Batavia Plan Circular," reprinted in *Educational Work*, 1906, vol. ii, p. 60.

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CHAPTER XV

Testing Results

1. The ultimate test of the efficiency of effort is the result of effort. Unhappily this test is seldom applied to the work of teaching. We judge the teacher by the process rather than by the product, and we introduce a number of extraneous criteria to hide the absence of a real criterion. We watch the way in which he conducts a recitation, note how many slips he makes in his diction and syntax, inspect his personal appearance, ask of what school he is a graduate and how many degrees he possesses, inquire into his moral character, determine his church membership, and judge him to be a good or a poor teacher according to our findings. All of these queries may have their place in the estimation of any teacher's worth, but they do not strike the most salient, the most vital, point at issue. That point is simply this: does he 'make good" in results? Does he do the thing that he sets out to do, and does he do it well?

It will be objected that this is an impossible criterion, — that the influences of the teacher's work can be determined only after his pupils have attained maturity and have demonstrated their fitness or unfitness for the duties of life; and at that time who can lay the responsibility of failure to your door or mine? Or perhaps it will be urged

that the real results of teaching are too complex and intangible ever to be weighed or measured by any method that finite mind can devise. Both of these objections must, in some measure, be sustained, and yet the situation is not nearly so hopeless as either statement would make it appear.

2. Taking either social efficiency or "moral character" as the ultimate end of education (and, from the practical standpoint, the two may be considered as synonymous), it is clear that the product of the school must fulfill some fairly definite and tangible conditions if his education is to be adjudged successful.

(*a*) In the first place, he must possess a certain capital of habit — or, better, he must possess a certain number of *habits*. These are essential to all who are to live a social life among other civilized men and women. There is nothing indefinite or intangible about this requirement. The necessary habits can be labeled and enumerated, and their formation during childhood can be prosecuted systematically and in graded steps, so that, at the end of each year, each month, each week, even, the teacher may test with reasonable accuracy his work in this respect.

3. (*b*) In the second place, the product of the school must possess a certain capital of knowledge, — a basis in facts and principles for the judgments that will be necessary in the meeting and solving of the problems of civilized life. Of what facts and principles this knowledge should best consist, educators are not in entire agreement. But this disagreement does not prevent whatever teaching may be devoted to the impressing of facts and

principles from being tested with a fair degree of accuracy, for in this field, too, the various items can be enumerated and labeled, and presented systematically and in graded steps. The pupil may be examined from week to week, or from month to month, or from year to year, in respect of his growth and degree of attainment. The difficulties are more numerous than in the case of habit, but they are not insurmountable; for, while the situation is intricate and involved, it permits of analysis and so makes possible a systematic attack.

4. (*c*) Finally, every individual who comes out of the school must possess a certain capital of ideals -- certain standards and criteria which are sufficiently colored with emotion to make them directive over his conduct. It is in attempting to meet this requirement that the actual results of teaching are apt to be so intangible and difficult of evaluation. And yet here one can at least label and enumerate the desired qualities. One may safely say, for example, that the pupil must be inspired with ideals of industry, accuracy, carefulness, steadfastness, patriotism, culture, cleanliness, truth, self-sacrifice, social service, and personal honor. It is true that one cannot tell in any specific case whether all or any of these ideals have been effectively implanted; a youth may give every evidence of being imbued with them, and still prove himself unfaithful in the ultimate test.

And yet, although the situation here is much more complex and involved than in the two preceding instances, it is still far from hopeless. We may be tolerably certain of

this, at least: the great ideals have their origin in specific habits, and habits can be rigidly tested. Farther than this, perhaps, we may not go, except to do all in our power to generalize the specific habits on the basis of ideals through whatever means may be at our command, — literature, history, art, biography, objective example. But the necessary basis of habit is under our control, and without that all else will be but little more than sentimental froth.

The common acceptance of "moral character" as the aim of education has this defect: it is so large a conception that those who propose it as the aim of education are apt to become confused in determining the means that will work best toward its attainment. And yet moral character certainly presupposes as its basis a multitude of effective specific habits. To paraphrase an ancient proverb one may safely say, "Take care of the habits, and moral character will take care of itself." This is not quite true, of course, for the factor of ideals must be reckoned with; but it is at least as true as the proverb which it paraphrases — and that is saying a great deal. But again, one must guard against the danger of using the term "habit" in too general a fashion. Character or social efficiency does not rest upon habit in general nor upon generalized habit; it rests upon a vast number of little, specific habits: the habit of saying "four" when the formula "two times two" is given; the habit of saying "I shall" when simple futurity is to be implied; the habit of bathing at regular intervals; of brushing one's teeth; of blacking one's shoes; of speaking distinctly; of speaking in a pleasant tone; of speaking courteously; of not speaking at all when others are speaking; of moving gracefully; of remaining motionless under certain conditions; of writing legibly; of taking off one's hat to one's elders and to

ladies; of giving precedence to women when passing through a doorway; of standing erect and looking one's interlocutor in the eye; of working steadfastly at this task or that until it is completed; of breathing properly; of repressing the impulse to yawn, the impulse to strike, and a hundred other impulses that nature never intended to be repressed, and yet the habitual repression of which is essential to civilized life. One could perhaps be "moral" if some of these habits were lacking; we know that one could not be socially efficient, and we doubt whether one could be moral if all of these habits had failed of development.

5. It may be concluded, therefore, that, in habit-building and in the imparting of knowledge, the efficiency of teaching can be accurately and adequately tested at stated intervals by any teacher. And it may further be concluded that, since ideals must operate on a basis of habit, even this phase of the educative process is not to be altogether excluded from the sphere of the educational measuring rod. It now remains to state explicitly how these tests may be made and what standards the teacher shall employ in any given case.

6. *Testing the Efficiency of Habit-building.* (*a*) *Purely Physical Habits.* The prime essential in testing the growth of any specific habit is to preserve some record of results at different stages. This is sometimes easily accomplished, particularly in cases where growth in power of written expression is concerned. It is more difficult in cases where the teacher must trust to mental images of former conditions. For example, in making correct posture either in sitting or standing a matter of habit, it is

often impossible to determine how much gain has been made, owing to the fact that the older conditions are not present and cannot be recalled with sufficient vividness to serve the purposes of comparison.

In a case of this sort, it is well for the teacher to supply himself with diagrams showing the proper position, and especially with photographs of classrooms where the pupils are sitting properly. These will furnish definite standards or ideals toward which effort may be directed. For one who visualizes freely, nothing is better than to inspect some school that is noted for its excellence in this particular.

The efficiency of habit-building, however, is not altogether dependent upon the existence of these standards or ideals. One must be certain that one's pupils are progressing toward the desired end. If the teacher has the standard well in mind, he will correct the pupils who assume inadequate positions. But if habit-building is to be effective, it is manifest that these corrections must become fewer and fewer in number as practice continues. It is well, therefore, to keep a simple record of the number of pupils that need correction each day, and of the number of times each day that any particular pupil requires correction. This record need not involve any very elaborate bookkeeping. A check mark may be made on a pad whenever a correction is made, and the names of the more troublesome cases can also be written upon this pad and checked against. This plan is effective in that it keeps the teacher informed as to the efficiency of his efforts. If the habits are not being formed, — if corrections seemingly

have no effect, — it is obvious that other methods must be employed.

The beginning teacher is apt, at the outset, to consider the habits of the pupils as very inadequate and to criticise the preceding teacher for leaving pupils in this condition. Later in the term, the habits seem very much more commendable, and the teacher congratulates himself on the results. Very frequently both judgments are unjust and inconsistent with the real facts. As the teacher comes to feel more and more that *he* is responsible for existing conditions, he tends unwittingly to emphasize the good points and to overlook those that are not so good. It is also true that pupils seldom do their best under a strange teacher. A certain degree of acquaintance must be gained before they can come up to their former standards.

7. In improving line-movement and similar mechanics of the classroom, standards are best gained by visiting schools that are especially good in this particular. In almost every city system there are one or two schools that enjoy a local reputation for good "mechanics." It is manifestly impossible to reduce such standards to the form of pictures or diagrams. While the routine is in process of crystallization, the teacher should reflect every day upon the degree of progress that has been made. If individual pupils are admonished for failure to do their part in preserving line-formation, some record should be made of the cases, and repetitions of such delinquencies should cause the teacher to look carefully into his methods. Where line-movements are a constant source of worry to the teacher, month in and month out, something is radically wrong with the process.

8. (*b*) *Written Work.* To secure good written work, — neat, legible, well arranged, — both on paper and at the blackboard, should be one of the earliest endeavors of the beginning teacher. Again the first requisite is an adequate standard for testing results. The visitation of schools where good written work is done will generally furnish one with these in abundance; the aim should be, however, either to secure papers that represent "first drafts" of the pupils' work or to have rewritten and corrected papers distinctly marked, so that one will not confuse them with "first drafts." In testing the efficiency of habit-building in this particular, it is the ability of the pupil to produce a creditable paper *on the first writing* that is important. Almost every pupil can obtain good results if given time enough and permitted to concentrate his attention upon form; but the very thing that we wish to develop is the capacity to do neat, legible, and well-arranged work quickly and while the attention is concentrated upon content. This is possible, however, only through formal exercises in which attention to formal matters is the main consideration, but the results of such drill should always be tested by reference to work in which the pupil uses the form as a means to an end.

This is a matter of extreme importance in the elementary school. If one attempts to cultivate habits of neatness, legibility, and good order in arithmetic or language work, one will always notice this phenomenon: after a certain degree of excellence has been attained through exercises that are more or less formal (that is, through exercises in which the content

is so familiar that the pupil may freely concentrate upon the form) there will be a falling off in formal excellence whenever a new subject is taken up requiring attention to content. For example, third-grade pupils are cautioned to "take pains" with their papers in arithmetic. As long as the problems are those with which they are familiar, a noticeable improvement will be made in form; the moment a new and difficult principle is introduced, however, the form immediately "falls off," but under the stimulus of the teacher's cautions it "picks up" as the pupil gains greater and greater proficiency in the new process. The explanation is probably to be sought in the psychology of attention. Attention cannot be concentrated upon two dissimilar things or processes or adjustments at the same time; attention to one thing always involves inattention to others.

This is not to imply, however, that the formal drills have been unavailing. The important point is this: the teacher should assure himself that *each new setback still represents an advance over the last setback.* When the pupils take up long division, for example, the papers for some little time may be poorer in appearance than they were just before long division was introduced; but they should be better than the papers immediately following the introduction of the last new principle, although these in turn were of lower standard than those immediately preceding the introduction of the principle.[1]

9. To test the results of habit-building in written work, therefore, it is well to keep complete sets of papers in all subjects and to compare these frequently in order to assure

[1] This is one of the most interesting principles that the concrete study of school work reveals. The writer has found the phenomenon so constant in its appearance under the conditions mentioned that he would respectfully suggest the general field as one that would amply repay scientific investigation by the expert educational psychologist.

one's self that progress is being made. The most convenient plan is to arrange each pupil's work in bundles, beginning with the earliest efforts. As each new paper is added to the bundle, it can be carefully compared with those preceding, and the advance noted. When new content is introduced, the paper immediately following the last introduction of new content should be compared with it. The advance each day will, of course, be gradual — often quite unnoticeable — consequently it is well occasionally to take papers that are a month or two months apart, where the advancement will be more accurately measurable.[1] If no advancement can be detected, or if there is a positive retrogression, the case is one that calls for an immediate and drastic change of method.

Professor Kirkpatrick has voiced the same caution in the following words: "In directing the formation of habits in which improvement with practice is desired, as in learning to write and draw, the teacher should be satisfied with the work as long as it shows improvement, but should be very careful when improvement stops, because one of two undesirable results is likely to appear: either the habit with its imperfect execution becomes fixed by repetition, so that after a time it is almost impossible to change it; or else, when the volitional effort to do good work decreases, the execution begins to revert back to a less developed stage at which it may then become fixed." [2]

[1] Sets of such papers would form excellent exhibits for educational meetings, expositions, etc. As indices of actual school work, they would be far more valuable than the laboriously rewritten and shamelessly "cooked" results that commonly make up such exhibits.

[2] E. A. Kirkpatrick: *Fundamentals of Child Study*, pp. 351 f.

10. *Blackboard Work.* Progress in adequate habits of blackboard work is rather more difficult to measure, owing to the impracticability of keeping former results for comparison. Standards and ideals can, however, be gained from inspection of good schools, and records can be kept of the corrections that are necessary. An important element in securing good blackboard results is to discourage the frequent use of the eraser. It is safe to lay down a general rule that the eraser should not be used except to clean the board at the conclusion of the exercise.

11. (*c*) *Habits of Speech.* In testing habit-building in oral expression it is again difficult to make accurate measurements of progress. The best plan is to take up one point at a time, beginning, say, with clear enunciation and good articulation. If corrections for lapses in these particulars do not decrease daily, the method employed is obviously ineffective. With mispronunciations and errors in construction, a more accurate record can be made of the progress. If one error is attacked at a time, pupils who need constant correction can be noted and perhaps subjected to individual instruction. In any case, these specific habits should be taken up systematically and drilled upon until perfect automatism results. A good course of study usually enumerates the common errors in speech that are to be replaced each term with effective habits.[1] The classroom teacher should arrange these in a definite order, so that he will know what to concentrate

[1] The Illinois "Course of Study" and the Montana "Course of Study" are especially helpful in this respect.

upon each week. He should, of course, supplement the list from errors that he observes in the course of class work. Again it is not sufficient that the pupil *know* the error and the proper form; too many teachers believe that efficiency in these matters can be adequately tested by a formal examination in language. The test, of course, is the *habitual use* of the proper form; that is, its use on occasions when one does not explicitly think about it. The only test here is a diminishing number of corrections in the daily expression of the pupils. "I knew, but I didn't think" is one of the many inadequate but commonly accepted excuses which make scamped work the rule instead of the exception in our schools. It simply means that correct expression has not been reduced to the plane of automatism, and this means that the work of habit-building has not been effective.

12. (*d*) *Testing Habit-building in Arithmetic.* (1) *Accuracy.* In making number facts automatic, it is necessary rigidly to test the results at very frequent intervals if wasteful processes are to be eliminated. Several methods of testing are available. The best criterion is probably the number of mistakes in the written problems of the pupils. In applying this test, it is necessary to preserve the arithmetic papers and to note the frequency with which the same combination is erroneously stated in the papers of each pupil. The total number of mechanical errors made by the entire class should also show a uniform decrease as the work progresses. It is probable that the number of mechanical errors will slightly increase immedi-

ately after the introduction of new principles, for the same reason that the form receives a setback at such times; but these temporary increases should become less and less noticeable as the child matures.

Another method can be applied by noting the proportion of pupils who make no errors in a single exercise. This number should show a gradual and uniform increase. In the oral work (the rapid "mental" solution of both abstract and concrete problems) the number of pupils giving incorrect answers should become smaller and smaller; it is a good plan to keep brief records with regard to these points.

13. (2) *Rapidity.* Efficient number habits must involve rapidity of combination as well as accuracy, although the latter factor is, obviously, of greater importance. After the combinations in any series (multiplication table of threes, for example) have been mastered accurately, — when 7 times 3 are 21 in the reaction of every pupil without any doubt, or any temptation on the pupil's part to say 22 or 24 or any other number save 21, — drill should be initiated for increasing the rapidity of the reaction. One very good device for this purpose is to have the table placed upon the blackboard by each pupil in the regular order: —

$1 \times 3 = 3$
$2 \times 3 = 6$
$3 \times 3 = 9$
$4 \times 3 = 12$, etc.

With watch in hand, the teacher "times" the pupil this exercise, encouraging competition in rapi

counteracting the inevitable tendencies toward inaccurate results and the careless writing of figures. After writing the table in the regular series, the pupils may be directed to erase the third column (the "answers") and to rewrite, beginning at the bottom. Again the teacher "times" the exercise. The pupils may then be directed to erase the figures in the first and third columns (the multipliers and the answers), the teacher later dictating multipliers in an irregular order, and requiring the third column to be filled from the top downward. This will check the tendency of the pupil always to refer back to the regular series in order to get any desired combination. In testing the efficiency of this drill, the records of the time consumed in each exercise should be preserved. The time should, of course, diminish with practice, otherwise the drill is ineffective.

14. (*e*) *Spelling.* The general inadequacy of the methods of teaching spelling as commonly applied in the schools has been adequately demonstrated by Cornman[1] in a very notable series of experiments. Dr. Cornman came to the conclusion that the "amount of time devoted to the specific spelling drill bears no discoverable relation to the result, the latter remaining practically constant after the elimination of the spelling drill from the school program." This simply means that, in Dr. Cornman's tests, it was found that formal

[1] O. P. Cornman: "Spelling in the Elementary School," in *Experimental Studies in Psychology and Pedagogy* (University of Pennsylvania), vol. i. Cf. Thorndike: *Principles of Teaching*, pp. 268–273.

and separate exercises in spelling had no appreciable result. The investigator in question argues from this fact that spelling drills should be eliminated and that the mastery of spelling should be accomplished in connection with the other school exercises. It should be stated, however, that he does not indorse the "incidental" teaching of spelling in the usual sense of the term. That is, he would require the pupils to focalize the form of words, and he would provide explicitly for such focalization, but he would not devote a specific school exercise to this task.

One may venture the opinion, however, that the meager results of the spelling exercises are due, not to the fact that spelling is given a specific place in the school program as Dr. Cornman implies, but to inadequate methods of teaching spelling during that exercise. As a matter of fact, in no school exercise is the inadequate comprehension on the part of teachers of the simple principles of educational psychology more clearly to be seen. The average spelling lesson is ineffective because the average teacher fails to understand the implications of the law of habit-building. Words to be spelled effectively must be spelled automatically, — that is, without "thinking" of the form of the word. To gain this end, however, the form must first be focalized and then the appropriate adjustments must be repeated attentively until automatism results. The average spelling lesson involves a certain amount of concentration upon the form, it also involves one or two repetitions. At this point, ordinarily, the whole matter ends. Very naturally the next time that the pupil meets

the word in the course of written composition, where he is concentrating upon the content rather than the form, he misspells the word.

15. The remedy for this condition lies in an adequate application of the law of habit-building. The initial focalization must be undertaken more carefully and the repetitions must be more numerous and must involve more explicit attention. It is insufficient to have misspelled words rewritten five or ten or even one hundred times, unless one can assure one's self that the repetition thus involved is conscious and focal. Words that are misspelled should be drilled upon, day after day, week after week, if necessary, until perfect automatism results. What is the test of effective teaching of spelling? Nothing more nor less than the infrequency with which misspelled words appear in composition work or other exercises where the pupil *concentrates upon content.* If improvement is shown in this respect, the teaching of spelling is obviously effective. If improvement is not shown, the teaching is ineffective. The composition papers should be kept and carefully studied with this end in view. The number of misspelled words in each one hundred should be carefully computed, and these computations should form the basis for judging the efficiency of the formal spelling lessons. Needless to say, these formal lessons should include the words that the pupils use in their expressive work, and especially the words that are difficult should be repeated from day to day in the spelling lesson, until absolutely no mistakes occur in the written work.

As an example of this method of measuring the results of instruction in spelling, the following test may be instanced. Prior to November 19, 1906, a ten-minute period was devoted to formal spelling in the Training Department of the Oswego Normal School. Since that time, the length of the spelling period has been doubled, and a specific time has been designated for the assignment of the spelling lesson, applying the method of assignment indicated in Chapter XIII. The papers that the pupils produced in their "story" work in the lower grades and in history in the upper grades were used as a basis of the test. The per cent of correctly spelled words in the papers of November 19th was computed and compared with the per cent of correctly spelled words in the papers of January 4th, 1907. The following table shows the gain made in each

Grade	Correctly spelled, Nov. 19	Correctly spelled, Jan. 4	Gain
IV "B"	87 per cent	98 per cent	11 per cent
IV "A"	93 per cent	98 per cent	5 per cent
V "B"	79 per cent	95 per cent	16 per cent
V "B"	80 per cent	96 per cent	16 per cent
V "A"	96 per cent	98 per cent	2 per cent
V "A"	95 per cent	98 per cent	3 per cent
VI "B"	95 per cent	97 per cent	2 per cent
VI "B"	98 per cent	99 per cent	1 per cent
VI "A"	94 per cent	98 per cent	4 per cent
VII "B"	96 per cent	97 per cent	1 per cent
VII "B"	96 per cent	99 per cent	3 per cent
VII "A"	98.1 per cent	98.3 per cent	0.2 per cent
VIII "B"	95 per cent	98 per cent	3 per cent
VIII "A"	96 per cent	98 per cent	2 per cent

of the several rooms in the school, and forms a fair index of the efficiency of the instruction in spelling. It should be noted

that the words forming the material for the spelling lesson were selected from the daily work of the pupils.[1]

16. *Testing Knowledge.* The efficiency of habit-building is to be measured by the pupil's ability to react appropriately in an automatic way — without "thinking" of the various elements involved in the reaction. The efficiency of instruction that seeks to impart facts and principles is tested by the ability of the pupil to apply these facts and principles to the problems of life in the formation of judgments.[2] Habit-building can be more easily tested in the school than the imparting of knowledge, because the school provides innumerable situations in which habits must function effectively, while it fails to provide many situations in which the knowledge gained is to be applied in judgment form. For example, the pupil writes and spells in the course of his everyday school work; his number habits function throughout the later work in arithmetic; he speaks, sits, stands, walks, and has social relations with other members of the school group. Any deficiency in habit-building is revealed clearly and unequivocally. But the child does not apply his knowledge in the same unequivocal fashion. In theory, it is true, he

[1] These results should not be interpreted as meaning that the lengthening of the period was entirely responsible for the improvement. No attempt was made to make the test an experiment to prove this thesis. Other factors entered, not the least important of which was a general insistence on "better spelling" in all work. It should be added, however, that words were not spelled for pupils during the composition periods.

[2] Cf. the distinction between habit and judgment in *The Educative Process*, chs. vii, viii.

may be expected to use his geographical facts in interpreting history, his arithmetical principles in the constructive activities of manual training, his physiological principles in making better the hygienic conditions of his daily life. But every teacher knows that this expectation is seldom realized in practice, and then only in a very small degree.

17. This lack of some real criterion for measuring the efficiency of instruction has led to the employment of a formal and rather artificial criterion, — the examination. The relative inefficiency of this method is a by-word among teachers, and there are not a few educators who would discard it entirely, evidently preferring no standard at all to an inadequate and often deceptive standard.

The examination, however, seems to possess certain virtues as an educative process that counteract in some measure its deficiencies as a test either of knowledge or of the efficiency of instruction. (1) It gives the facts and principles to be mastered a certain importance in the eyes of the pupils that might otherwise be lacking. (2) It furnishes a motive for the compact organization and close correlation of facts and principles; it is a unifying and integrating agency without the operation of which instruction is prone to "scatter," and knowledge to be diffuse and incoherent.[1]

18. The problem would therefore seem to involve the

[1] Cf. *The Educative Process*, ch. xxii; a similar position is also taken by L. Dugas: "Psychologie des Examens," in *Revue Philosophique*, 1904, vol. lviii, pp. 379–399.

improvement rather than the elimination of the examination. In one way or another, the examination must be made to test, not the memory for specific and unrelated facts, but the capacity of the individual first to organize, and secondly to apply, the facts and principles that constitute the subject-matter of instruction.

It is in respect of the latter point that the greater difficulty will be met. A fact or a principle is obviously valuable only in so far as it may either be applied to the problems of life or form the key to other facts and principles that may be so applied. Knowledge which fulfills neither one of these functions is just so much useless furniture which mind will discard at the earliest possible opportunity. The great trouble with the average examination is that it does not test these two capacities. Consequently it is not the check that it should be upon the efficiency of instruction; for, if knowledge is to be used, it must be imparted in such a way that it can be used. The examination, as usually conducted, tests the memory for discrete facts: consequently the instruction aims at fixing such facts. If the examination could be remodeled, instruction would necessarily be modified to meet the new demands.[1]

[1] The influence of examinations on methods of instruction is clearly to be seen in school systems that are dominated by formal examinations sent out from a central office. The questions are preserved from year to year, and pupils are drilled upon these questions to the practical exclusion of other methods of instruction. This is not education in any sense of the term, and the practice has, through its abuse of the examination, brought the latter into a disrepute that is not justified. In this connection, cf. H. Latham: *Examinations considered as a Means of Selection*, Boston, 1886, chs. ii, vi, ix.

The general inadequacy of the average examination as an index of the ability of the pupil is well evidenced by the writer's experience in the training of teachers. He has found that proficiency in academic work as measured by the examination test is in no sense correlated with the ability of the students to do effective teaching in the practice school. Very frequently the students who have the lowest records in the academic department make excellent records in practice, and, even more frequently, the students who are sent from the academic courses with the highest grades, make most disastrous failures in actual teaching.

Similar testimony is offered by university experience, as witness the following: "In university faculties the observation has been very often made that graduates who come from colleges with the highest standards of attainments as tested by examinations, are less disposed to attempt original work and are less successful when they do so. They have been trained in receptive processes, and it is a serious question whether examinations do not tend directly to prevent knowledge from striking deep root, and to delay it in the 'memory vestibule.' If this be true, they are a distinct hindrance to the assimilation of mental pabulum." [1]

19. How should examination questions be set in order to fulfill the conditions essential to making the examination a test of ability to organize and apply rather than a test of ability to remember isolated facts? In the first place, the teacher must bear in mind the fundamental principle of effective testing, which has been very clearly formulated by Professor Thorndike: [2] "To know whether any one has a given mental state, see if he can use it; to know whether

[1] G. S. Hall: *Confessions of a Psychologist*, Worcester, p. 52.

[2] E. L. Thorndike: *Principles of Teaching*, p. 260.

any one will make a given response to a certain situation, put him in the situation arranged so that that response, and that response alone, will produce a certain result, and see if that result is produced."

The only practicable method of applying this principle to the formal examination is to construct ideal situations and ask the pupil to apply his knowledge to their solution. Thus the examination questions in arithmetic will be made up largely of concrete problems, taken from real life — problems that the men and women in the world are facing every day. The same class of questions should be given in other subjects.

Questions of this type are to be found in the problems of the better and more recent text-books. Especially to be commended in this respect are the Meyer and Brooks arithmetics, the Smith arithmetics, and others of similar scope. The Tarr and McMurry and the Dodge geographies will also furnish valuable suggestions. Best of all, perhaps, from the standpoint of the pedagogy of test questions are some of the recent books in educational theory; especially O'Shea's *Dynamic Factors in Education*, De Garmo's *Principles of Secondary Education*, and Thorndike's *Principles of Teaching*, in each of which the various chapters or sections conclude with practical topics and questions, suggesting actual situations which are to be solved by an application of the principles brought forth.

20. It must not be forgotten, however, that the ability to organize knowledge into coherent systems should form an important factor to be tested by the examination. In the writer's experience it has been found best to direct either one in every three, or one in every two, of the ques-

tions asked in an examination toward this end. Such questions should be broad and general in their formulation, thus both testing and encouraging the capacity for organization. The remaining questions should be specific and pointed, having particular reference to the solution of practical, concrete situations.

The following questions on the geography of South America may serve to illustrate the principle: —

(1) Discuss the location and extent of South America. (This is a general question, and, to be answered adequately, requires the ability to hold a number of facts in mind and to determine the relations between them. Thus the question might be made more specific by asking that South America be located with respect to other continents, and by requiring definite comparisons of South America with other continents in respect of extent. The instruction, however, should have made clear that a topic like this involves these various points.)

(2) Would London or New York be in a more favorable position for commerce with Buenos Ayres? Give reasons. (This is a specific question, demanding the practical application of the general principles brought out in the first question and having direct reference to a matter of practical business significance.)

21. It is clear that examination questions of this type will demand a rather marked modification of methods of teaching; and this, after all, is the important point. *If knowledge is to become applicable to the needs of life, it must be presented in a manner that will bring out its practical or social values.* Examination questions can then be framed that will test the pupil's ability to apply the knowl-

edge gained. If such questions are answered inadequately, it simply shows that instruction has been inadequate; consequently the formal examination can be made a test of the efficiency of instruction as well as a method for encouraging organizing activity on the part of the pupils.[1]

22. *Marking Examination Papers.* Except in mathematics or some similar branch of exact science, it is impossible to apply an exact scale of marking. For example, if in a geography test there are the questions similar to those given above, one cannot value a pupil's answers on the basis of a finely graduated series of marks — running, say, from 1 to 100; but one can safely say whether the pupil's answer is excellent, good, fair, poor, or absolutely bad. If different teachers mark the same papers on the scale of 100, a certain variation will be found in the grades given by each. In fact, if the same teacher marks the same paper at different times, a certain amount of variation is almost always to be noted. On the other hand, within wider limits, the variation is slight; that is, an excellent paper will usually be so adjudged by different teachers and by the same teacher at different times; and a poor paper would be very infrequently marked excellent,

[1] It is well to have access to typical examination questions set in different subjects, together with the average standings obtained by various classes taking these examinations. In this way the teacher can "check" the efficiency of his own teaching by comparing his results with others. Rice's articles, referred to at the close of this chapter, furnish sets of "standard" questions in arithmetic for Grades IV–VIII inclusive, and also give the results of a large number of classes taking these examinations. The "Springfield" questions are also available for comparative tests. (See Appendix C.)

or good, or fair, under any conditions. Consequently, although finely graduated markings are not to be trusted, the possibility of a reasonably accurate marking must be admitted.

23. To summarize: the efficiency of instruction may be tested by a careful application of the method of formal examinations. This test will not be so accurate as are the various tests to which habit-building may be subjected, but it is far better than no test at all, and it may be made more and more effective by gradually improving the technique of examination questions, and by adopting a scale of grading more elastic than the numerical system affords.

REFERENCES. — Thorndike: *Principles of Teaching*, ch. xvi; Dutton: *School Management*, ch. xiv; Seeley: *A New School Management*, ch. xv; J. M. Rice: articles in *Forum* as follows: vol. xxxiv (1902), pp. 117–130; 181–297; 437–452; 588–607.

CHAPTER XVI

The Disposition of the Teacher's Time

1. The efficiency of the teacher is influenced by a variety of factors, but the chief of these is his ability to give a maximum of attention to the problems involved in instruction. If his life is not so ordered that he can meet each class with a maximum of energy at his disposal, the value of his work to the community must be seriously impaired. It is germane to our problem, therefore, to inquire into the disposition of the teacher's time, not only in school, but also out of school.

2. The *prime school duties* of the teacher may be classed as instructional and disciplinary. Both are important in and for themselves, and neither should be neglected for the other. The *accessory school duties* may be classed as clerical and administrative. These are not to be neglected, but should never be permitted to interfere with instruction and discipline.

In every well-regulated life there must be a time that is specifically allotted to all routine tasks. The teacher's hours of actual service are comparatively short — at most thirty hours each week for a maximum of forty weeks, or twelve hundred hours annually. In view of this fact, it is not too much to expect that the teacher dispose of the necessary clerical work outside of the regular school hours. By far the

best plan is to set aside the hour immediately following the close of the daily session for such work, and to keep reports and records "up to date." The tendency to postpone clerical work until reports are called for is pernicious and should be strenuously combated from the outset.

3. The *out-of-school duties* of the teacher may be conveniently designated as (*a*) professional, (*b*) hygienic, (*c*) civic, and (*d*) social and personal.

(*a*) *Professional Duties.* These include (1) preparation of school work, and (2) study, reading, and discussion along broader educational lines. To the true craftsman the dominating interest in life is the doing of each day's work in the best possible manner. To him no other reward can ever equal the consciousness of work well done. It takes some time, however, for the young teacher to assume this attitude. His first experiences will fascinate him because of their novelty, but when this novelty wears away, — as it must sooner or later, — there will almost invariably ensue a period of time, more or less protracted, during which he must hold himself strenuously to his tasks, and resist with all his power the inevitable distaste for continued effort. This is the most critical period in the life of any worker, and it is during this time that every teacher stands in direst need of all the encouragement and inspiration that he can command.

One of the surest means of attaining the mental attitude that finds the daily tasks fascinating in themselves is to set out resolutely with the intention of making the day's work the most important phase of life. The most effective

way to fortify this resolution is to give from the very beginning a stated period of time outside of the regular school work to preparation for, and reflection upon, the details of that work. From two to three hours in the evening will be none too long for this purpose. Every lesson that is to be taught should be worked over beforehand. The best manner of approaching the lesson should be determined, and questions framed that will prepare the class for the new material. Illustrations should be sought from all possible sources, worked over, and adapted to the age and mental attainments of the pupils. At the beginning, the teacher would do well to write out carefully the plan of each lesson, including the specific questions and explanations, and to rehearse the whole before an imaginary class. This is a strenuous program, but it will return large dividends upon the time and energy invested. In addition to work of this nature, one should reflect carefully upon the order in which pupils are to be called upon for recitation, and adapt questions and topics to the peculiarities of individual children. Finally, the independent work of the pupils during the study periods should be planned and the necessary materials provided.

4. An important task of the teacher in connection with out-of-school work is the supervision of written exercises. This should not be classed with the clerical duties mentioned above, for it is too important to be left for the clerical hour after school when the teacher's energies are necessarily at a low ebb. The wise course is not to demand written work from pupils in so large an amount that

it cannot be carefully supervised in the evening without intruding upon the time that the teacher must devote to the preparation of lessons. In many cases, teachers give too much time and energy to the correction of examination papers, problems, essays, and note-books, and too little attention to preparation for teaching. The very fact that so much written work is demanded often renders the labor of the teacher in correcting papers quite without effect. Pupils continue to make the same mistakes because the large number of mistakes precludes effective concentration upon any one, and because, in the chaos of interlineations and marginal comments, it is impossible for the pupil to attack the mistakes in the systematic manner that alone will bring results. If the written work in most of our schools could be reduced to about one third of its present proportions, the efficiency of instruction would be greatly increased.

5. (2) *Broader Professional Culture.* The young teacher can fortify the craft spirit by forming regular habits of study both along general educational lines and in gaining a more thorough grasp upon specific subject-matter of instruction. He should read regularly three or four educational journals. One of these should be his state or local journal, another a national school newspaper. These will give him the "gossip" of his craft — the personal items concerning the men and women who are his colleagues in school work. He will become familiar with the "big names" of contemporary education, and will know what the great movements are and the people who stand

for them. Another journal should be devoted to the particular problems of the special field with which the teacher is most intimately concerned, — primary work, upper grade work, high school work, as the case may be. A fourth should be one of the more general reviews, covering the entire field of education and discussing school problems in their very broadest relations. Not everything in all of these journals should be read by every teacher, but it is well to have access to at least one journal in each of the four classes, and to examine every number carefully to discover what it contains that may be of value.

In this day of periodical literature, one very easily contracts a vicious habit of desultory reading. In fact, this habit bids fair to become one of the most pernicious intellectual diseases of modern times. So great a variety of reading matter is provided at so small a cost that one is tempted away from that protracted and sustained reading from which alone one can make measurable gains in culture and attainment. Disconnected items of information are not educative, except in homœopathic doses. The cheap magazines and weekly newspapers that cater to the popular demand for change and variety are undoubtedly doing much toward weakening the intellectual fiber of the race. One does not realize how pernicious is their influence until one sits down to a serious piece of work in an environment that is filled with these distracting influences. The best plan for the young teacher is to keep out of temptation's way, otherwise he is apt to find that all of his well-laid plans for evening study and self-improvement come to naught. Certainly, as a matter of habit, he should read at least two serious articles in a general educational review each month. This is an example of what Professor James terms

"giving the will a little gratuitous exercise." The articles may not be particularly interesting or particularly germane to his work, but the fact that they appear in a high-class review indicates that they are important, and a great many articles that seem dull and heavy at the outset will be found interesting before they are finished.

6. Every teacher should read each year one or two of the season's new books on general education. Some of these are not to be taken too seriously, but many of them will give fresh points of view and offer valuable suggestions. Educational theory is just now in a transition stage of its development, and no one can tell at what moment some epoch-making principle may be enunciated. It behooves the progressive teacher to keep in touch with the firing line, even though he reserves his own judgment as to the practical significance of each little victory.

7. *Teachers' Associations.* It is unnecessary to point out the stimulus which the annual state and national gatherings of teachers give to the craft spirit. The young teacher should avail himself from the outset of this medium of inspiration. Again, what is presented in the formal papers is not always to be taken too seriously, but the give-and-take discussion of mooted questions, the animated "shop talk" of the hotel lobbies and parlors, the opportunities to exchange experiences with others who are facing similar problems — these factors often give the meetings an untold value.

In this connection, also, must again be mentioned the visiting of schools. The teacher who limits his profes-

sional life to the narrow confines of his own classroom is almost certain to have low standards of instruction and discipline. To have in mind a vivid image of conditions in a first-class school is to have an ideal toward which one's own energies may be directed. Not a few teachers conscientiously believe that their pupils are doing just as good work as can be got from them; a visit to another school of the same grade is apt to open their eyes — unless, indeed, they be hopelessly blinded.

8. (*b*) *Hygienic Duties.* The teacher must preserve his health if his work is to be maximally effective. The work of the classroom is extremely fatiguing — far more so, in the writer's experience, than anything in the way of administration or supervision. One's attention must be continually concentrated, and concentrated upon the same thing for relatively long periods of time. It is for this reason that every effort must be made to supply an adequate amount of energy and to husband this energy against the time when effective concentration is most needed. Sufficient sleep is the first requisite, and not even a zeal for the preparation of lessons should interfere with regular hours of complete rest. Exercise is also important, and many teachers devote the hour from five to six to exercise in the open air. Next to sufficient sleep an abundance of nutritious food, rich in proteids, should be the last factor to neglect. For those engaged mainly in intellectual work, the heavy meal of the day should come at the close of the day's work, not at noon. The processes of digestion can then be given the necessary two hours in which to do

their work before one attacks the serious tasks of the evening.

9. (*c*) *Civic Duties.* The ideal democracy is not direct government by the people, but rather a government by experts who are responsible to the people and in whom the people can repose implicit confidence. It is inconsistent, to say the least, to leave governmental functions to amateurs when every other department of the division of labor is in the hands of specialists. This ideal, however, is far in the future, and until it is realized every citizen must devote a portion of his time and energy to the work of government. The teacher is no exception to this rule, although the fact that most teachers are women, and that women have little direct influence in political matters, makes the situation here rather different from that which obtains in other crafts and professions. Nevertheless even women teachers should interest themselves in political movements, and use every influence within their power to promote the ends of civic virtue. They should, at least, give the inspiration of their presence to associations and meetings that have for their object civic improvement. In not a few instances municipal reforms in the direction of cleaner streets, more artistic buildings, better parks, more equitable taxation, etc., owe their initiation to the activity of public school teachers; and every expression of sane and temperate public spirit on the part of teachers cannot fail to act reflexly upon the schools themselves, giving them an increased hold upon the respect of the community, and elevating their importance in the eyes of the pupils.

Nor must the teacher be blind to the responsibility that rests upon him for developing effective ideals of civic virtue in the minds of his pupils. All dominant ideals of conduct must have their inception in childhood and youth. Reforms can be initiated "from the top," but if such reforms are to be permanent, their necessity must be impressed upon the minds of the rising generation. The contemporary revolution in the ethics of government, of politics, and of business enterprises will doubtless have but small effect upon the conduct of the great mass of men and women belonging to the dominant generation. These men and women will indeed admit the necessity of such reforms, but their habits are too firmly established to be transformed in a day; they have been looking at things in a different light too long to admit of a sudden "change of front," no matter how acutely the need of such a change may be felt. But all this agitation toward a higher conception of public service should furnish the most favorable condition for inspiring youth with higher standards and ideals than those which govern the present generation, and the duty of the school plainly lies in this direction. The teacher should never lose sight of the fact that it is within his power *to transform the character of a race*, for the character of a race is determined by its dominant ideals, and these the skillful teacher can mold to his own liking. That the hope of the future lies in the youth of the present is a platitude so often repeated as quite to hide from view its fundamental truth. And yet each new interpretation of education from the standpoint of modern science, and each new investigation into the history of education among different people and diverse races, add convincing testimony to this fact. The opportunity lies with the school, and, under our modern conception of ethics, with opportunity must go responsibility.

10. (*d*) *Social Duties.* Recreation in one form or another is necessary for maximal efficiency in any line of

work, and nothing more accurately indicates the character of a man than the way in which he seeks recreation — the way in which he spends his leisure. For the teacher, dealing as he does with immature minds, some form of recreation that will afford a complete change of environment is absolutely essential if he is to escape the intolerable pedantry and dogmatism to which the members of his craft are so commonly subject. He should frequently seek social diversion among men and women who are engaged in other lines of work. He must strive to retain that plasticity of adjustment that will enable him successfully to adapt himself to general rather than technical interests. This does not mean that he should be ashamed of his colleagues in education, or ashamed of his calling as a teacher. It simply means that, in common with men and women in other walks of life, he should be able to drop his professional mannerisms on occasion and to think and talk in terms other than those used in his daily work.

11. What proportion of his time may the teacher devote to social diversion? Of course one cannot propose a dogmatic answer to this question, but there are certain factors that should be borne in mind in every specific determination. The necessity for evening work will preclude social engagements on at least five evenings of the week. The teacher is sometimes apt to rebel at this suggestion, forgetting that, unlike workers in other fields, he has one day each week (usually Saturday) free from classroom employment. In return for this, the community has a right to expect longer actual hours of work upon

other days. This arrangement, however, leaves two evenings free for recreation. The teacher is also unique in having a longer annual vacation than other workers. Certainly a part of this vacation should be spent in professional improvement — "keeping up with the times"; but the rest is free for whatever healthful recreation the teacher may care to take. On the whole, therefore, it is hardly too much to expect of a teacher that, during five days of each week throughout the school year, he make the problems of his daily work the dominant subject of his attention.

REFERENCES. — Dutton: *School Management*, chs. ii, iii; Seeley: *A New School Management*, ch. xviii; W. E. Chancellor: *Our Schools: Their Administration and Supervision*, Boston, 1905, ch. xi; Keith: *Elementary Education*, ch. xiv.

CHAPTER XVII

The Teacher's Relation to Principal, Supervisors, and Superintendent

1. The successful operation of a school system involves the *organized* effort of a number of individuals toward a common end. As in other social institutions, the highest degree of efficiency is secured by centralizing authority and responsibility in a single individual. To this individual is delegated a degree of power commensurate (theoretically, at least) with his responsibility. In some systems both the power and the responsibility of the superintendent of schools are almost negligible factors: the office is a mere bagatelle, concerned only with clerical and mechanical functions. There can be no doubt, however, that the present tendency is toward a stronger and closer organization of educational forces within the limits of a conveniently large "working unit." The city community represents the type of such a unit. The county school system and the state school system must necessarily be much looser in their organization because of the difficulty that confronts a single head in governing widely separated elements.

Wherever a *system* of schools exists, the classroom teacher is responsible to the head of that system, who in turn is responsible to the representative board of educa-

tion, and this body to the community at large. Owing to the complex character of our governmental machinery, however, a division of responsibility commonly confronts the superintendent, for he is answerable not only to local authorities, but often to state authorities.

2. Generally between the superintendent and the classroom teacher intervenes the *principal* of the building. The office of principal is now recognized as one of the most important in the school system — perhaps, everything considered, the most influential for good or ill. The position of the principal is quite analogous to that of a ship's captain. He is responsible for everything that belongs to or goes on within the limits of his school, — for the instruction, for the discipline, for the care and condition of the material equipment. Teachers, supervisors, and janitors are all answerable to him for the efficiency of their work. The prevailing tendency is to relieve the principal of teaching duties in order that he may devote all of his time and energy to the general welfare of the school.

3. An obvious corollary of this condition is the necessity for loyalty on the part of each subordinate to his chief. A centralized organization can be effective upon no other assumption. *Unquestioned obedience* is the first rule of efficient service. The classroom teacher owes this to his superiors, and whenever he cannot yield such obedience, his resignation is the only alternative.

In practice, this condition is not so arbitrary and autocratic as it may appear in cold print. The responsibility

of teacher to principal or superintendent is almost exclusively *a responsibility for results*. Certain requirements are made in the way of results. Pupils must be taught certain facts, drilled into certain habits, in each grade. The superintendent demands these results of his principals, the principals pass on the demand to the classroom teachers, the classroom teachers exact the required work from the pupils. A group of unorganized teachers, each working independently and unsupervised, *might* secure the same results, but the chances are strongly against the supposition. Centralized authority, working through intermediate officials, is the only known method of insuring economy of school administration in this respect.

When it comes to the details of method and the technique of instruction, however, the classroom teacher is left very largely to his own initiative. Superintendents and principals rarely go beyond suggestion in such matters, although there are sometimes occasions when suggestion must be interpreted to mean authoritative direction. The same is true in respect of discipline. It is the end of discipline that is important in the eyes of the principal and superintendent; the teacher must work out the method. It will readily be seen that the initiative of the classroom teacher has still a large scope even under rigid systems of organization and supervision.

It must not be inferred that the classroom teacher has no voice, even in the larger questions of policy in the administration of the school system. Although the typical organization appears to be little less than an autocracy when viewed from

the outside, it is almost a democracy in the great majority of city systems. The classroom teachers are regularly assembled for discussion of important questions with the principal of the school, and the principals meet regularly with the superintendent. In small systems all of the teachers meet together at frequent intervals. The general policy in all such meetings is to permit absolute freedom of speech. If a subordinate teacher does not agree with any prescription that is made for his conduct, he is generally at liberty to state his reasons in this forum. It would be a rash superintendent, indeed, who would attempt to carry through a measure that met decided disapproval from his subordinates. Whenever a decision is reached, however, the subordinates must accept it, no matter what their individual opinions may be. Discussion is then closed and the time for action has arrived.[1]

4. *The Teacher and the Special Supervisors.* Practically all of the larger systems of schools now employ special supervisors of music, drawing, manual training, and sometimes physical culture and nature study. These supervisors go from school to school, giving model lessons in each room and instructing the classroom teachers in the technique of their special branches. The classroom teacher is responsible to the supervisor for the special work supervised, and for the methods employed in such work. The supervisor is, however, under the nominal control of the principal in whose building he chances to be at work, consequently the classroom teacher's first

[1] An able discussion of the relation of the classroom teacher to the principal and superintendent will be found in a paper by ex-Superintendent E. P. Seaver of Boston, published in the *Report of the Commissioner of Education*, Washington, 1899, pp. 546 ff.

loyalty is to the principal. This rule does not hold in all cases, but it is manifestly the only way in which an equitable balance can be maintained between different lines of special work.

5. *Rural-School Supervision.* The teacher in a rural school is usually under the control of a county superintendent or a district commissioner. In many cases this supervision is much more efficient than it would seem possible to provide in view of the large area to be supervised and the difficulty of carefully inspecting the work at frequent intervals. The county superintendency is commonly an elective office, and this factor operates in a few instances to prevent an effective criticism of teachers. As contrasted with the liberal financial support of city schools, rural education is, as a rule, most inadequately provided for. This involves, among other unfortunate consequences, the employment of young, untrained, and inexperienced teachers in disproportionate numbers. An efficient system of supervising these teachers becomes, therefore, of fundamental importance, and the office of the county superintendent should be looked upon as one of the most significant and responsible posts in the school system.

6. *Summary.* The problem of the relation of the classroom teacher to his superior officers should be solved by an attitude of obedience to constituted authority. This is very far from saying that the teacher should adopt an attitude of servility; intelligent loyalty is the better term to employ. The situation is entirely analogous to that in any other organization or system, — the army, the

navy, governmental departments, great business enterprises (or small business enterprises, for that matter). Concentrated effort can be secured in no other way. The teacher should thoroughly understand this basal proposition and act in accordance with its dictates from the outset. Youth is prone to resent authority. Indeed, it is hardly too much to say that our contemporary theories of education do much, perhaps unconsciously, to inculcate an attitude antagonistic to authority. This represents a healthful reaction against the ultra-machine tendency prevalent in school organization some years ago, but it is a reaction that can easily be carried too far.

REFERENCES. — W. E. Chancellor: *Our Schools: Their Administration and Supervision*, Boston, 1905, chs. iv–vii; Dutton: *School Management*, chs. vi, xix; Seeley: *A New School Management*, ch. xix; Roark: *Economy in Education*, pp. 88–91.

CHAPTER XVIII

The Ethics of Schoolcraft

1. The relation of the classroom teacher to his principal and superintendent is but one of the many questions that are gradually becoming crystallized in the unwritten laws that govern the teacher's calling. Every trade and profession must possess a recognized code of craft ethics, — certain standards of right and wrong, honor and dishonor, as these terms are applied in the special field that the trade or profession covers. The tenets and doctrines of these ethical systems are sometimes elaborately organized and impose restrictions upon the members of the guild the value of which a layman may frequently find it hard to appreciate. The ethics of medicine, for example, forbids a physician to advertise his services save in a most modest and unobtrusive fashion. The moment that the physician breaks this unwritten law, he is ostracized from the society of his fellow-craftsmen. Military service is carefully guarded by restrictions, imposed by military tradition, which demand of all initiates into the service a standard of personal honor that is much more exacting than similar standards in civil life. The various fields of fine art — music, painting, sculpture, architecture — are also dominated by codes of craft ethics many of whose tenets are frequently meaningless to the uninitiated. Nor

are the manual trades exceptions to the general rule: carpenters, plumbers, stonecutters, metal workers, all have their peculiar standards and ideals in which each apprentice is carefully instructed, and to which he must prove his fidelity or lose the caste of craft.

The essence of the craft or professional spirit is revealed in each of these instances; in matters pertaining solely to craft welfare, *the members of each guild legislate for themselves.* The guild is essentially a close corporation; its rulings are self-imposed, self-sustained, and self-sufficient.

2. From one point of view, education suffers in comparison with other human callings in just this fact: it has not as yet developed an adequate system of craft ethics. If a human calling would win the world's respect, it must first respect itself. And the more thoroughly it respects itself, the richer will be the measure of homage that the world renders it. War, medicine, art, literature — all bear testimony to this principle. To be faithful to the craft spirit is the highest ambition of a true soldier, a true physician, a true artist. To lose the caste of craft is the most severe punishment that can be inflicted upon him. For the plaudits or the sneers of the crowd he cares but little. He seeks commendation from another source — from a source that metes it out less lavishly, and yet with unconditioned candor; he seeks the commendation of his fellow-workmen, the applause of those who *know.*

3. And what are some of the ideals and standards that the new schoolcraft is slowly crystallizing into an ethical code? First and foremost stands the conviction that the

work of teaching is coördinate in rank and dignity with other branches of the public service; that its work to be done well must be done by trained specialists who devote their best energies to the solution of its problems; that any one who looks upon it as a "stepping-stone" or a "time-filler" offers it an insult which mere decency and self-respect demand that it resent. And the true teacher will not be patronized. He does not need to be told that his work is "the noblest and highest of all human callings" — a sample of the pious mouthings not infrequently voiced by men who would not for a moment encourage their sons to enter the work of the public schools. If the teacher is a true craftsman, he knows what education means — he knows this far better than a layman can tell him.

4. In the second place, the craft spirit in education will insist that its own trained and expert judgment shall establish craft standards of excellence and efficiency. It will resent the unwarranted interference of laymen in purely technical matters. It will resent such interference manfully and vigorously as would a reputable physician, a reputable artist, or a reputable engineer in a similar situation.

5. In the third place, the craft spirit in education will turn a deaf ear to excuses. It will hold each member of the guild strictly responsible for the task that he has assumed. Not the inefficiency of previous teachers, nor the poverty of the homes from which pupils come, nor the peculiar conditions of the social environment, will be accepted in lieu of the results demanded. This seems the cruelest, the most relentless, of all possible standards —

and yet it is the only standard that will bring schoolcraft to an equal rank with other callings. As Kipling says of Findlayson in the *Bridge Builders:* "There were no excuses in his work. Government might listen, perhaps, but his own kind would judge him by his bridge, as that stood or fell."

6. In the fourth place, the craft spirit will demand high standards of scholarship and preparatory training for admittance to the guild. It will reject the idea that, because teachers deal with little children, their minds are the minds of children, or that their intellectual pabulum should consist of milk and water. It will stand for reason and abjure sentiment.

7. In the fifth place, it will insist upon the conception of schoolcraft as *social service*, and that *the rewards of such service are not to be measured in dollars and cents*. In this respect it will class its guild with art, music, literature, discovery, invention, and pure science. If all of the workers in each of these lines of human activity demanded of the world the real fruits of their self-sacrifice and labor, — if they received all of the riches that have flowed, directly or indirectly, from their efforts, — there would be very little left for the rest of mankind. Each of these activities is dominated by a craft spirit which recognizes this fundamental truth. The artist or the scientist who has an itching palm, who prostitutes his craft for the sake of worldly gain, is quickly relegated to the oblivion that he deserves. He loses the caste of craft which is more precious to the true craftsman than all the gold of the modern Midas. In each of these branches of activity,

service is its own reward, and this must be true of education. All that the true teacher should ask of the world is a living wage, the privilege to serve, and "a seat at the table around which the competent members of his guild hold council."

If one should think this standard to be visionary and impracticable, a brief acquaintance with the ideals of other crafts and professions will quickly dispel the illusion. Let such a person turn to the biographies of Darwin, Spencer, Helmholtz, Huxley, Müller, Newton, and a score of other masters in science. Let him inquire of the men on the geological survey who first laid bare the great gold deposits in Alaska and still remained faithful to their service and content with their pittance. Let him ask the scholars at a score of universities. Let him ask any one of a thousand talented men who are devoting their lives to painting, sculpture, music, pure literature, for the sake of an art that they might far more comfortably commercialize and exploit for their own pecuniary benefit. The answer will be the same in every instance. All that these men ask is a living wage and a chance to serve. It is only a great national delusion — a virulent jaundice of the mind — that leads men to believe that efficient service can be obtained only under the stimulus of the dollar. Our national ideal, "Material success at any price," has woefully distorted our perspective.[1]

[1] The advice of the late Senator Hoar to the students of the Yale Law School represents an effort to reëstablish in the legal profession the ideals of service that formerly inspired the lawyer to his best work. The following extract indicates the spirit of his plea: —

"If you will walk these high paths, you must abandon the pursuit of wealth as a principal or considerable object. Of course the lawyer must have his *quiddam honorarium*. He must have his ample library. He must provide for his wife and children a comfortable home, lay up something for old age, and start his children in life with a good education, and the stimulant of his own good example. That is pretty much all. I hope

8. In the sixth place, the craft spirit in education will abjure pedantry and dogmatism. It will discount the hypertrophied "good-goodyism" that so often emanates from an overweening consciousness of mental or moral superiority. It will hold industry, courage, and efficiency as the cardinal virtues; sloth, inefficiency, and covetousness as the cardinal sins.

9. Fundamentally, teaching is a creative as well as a conservative art. Its task is to mold a certain raw material into a certain desired product. Society imposes certain limitations and restrictions upon the process of creation in education, just as convention restricts the painter, the sculptor, the composer, the poet. The product must represent certain definite minimal requirements; but when this condition is once fulfilled, the teacher, like the artist, has a large scope for his creative talent.

Society demands that the product of the school shall be able to read and write and "cipher." These conservative factors will always form an irreducible minimum of

to see our profession everywhere return to its ancient and healthy abhorrence of everything that savors of speculation in justice. When you are once known to the people, not as masters of the law, but as traders and traffickers seeking your own gain, the virtue has gone out of you." — Quoted by W. G. Cook, in *North American Review*, 1906, vol. clxxxiii, p. 114. A similar view with regard to the profession of scholarship is taken by Professor W. M. Payne (*International Quarterly*, 1904, vol. viii, p. 273): "That scholar is unworthy of his high office who joins in the querulous complaint raised now and again to the effect that scholarship does not command material rewards proportional to those won by other forms of endeavor. Are its own peculiar rewards to count for nothing then — its honors, its self-sufficing activities, its sense of the esteem in which it is held by all whose approval is worth having?"

education. Their necessity is inherent in the very essence of civilization, for civilization demands first of all that men lead the social life at the very foundation of which must always lie an effective medium of communication; and civilization demands a division of labor and the interdependence of social units for material necessities and comforts, and for this reason an effective means of computation is indispensable. If civilization were to begin anew, formal education would still be face to face with the three R's.

But the finished product of the teacher's art must be more than a reading-writing-ciphering automaton. It must represent a highly complex mechanism of civilized habits, delicately adjusted to respond effectively to the innumerable stimuli of an increasingly complex social life. It must represent a storehouse of organized race-experience, conserved against the time when knowledge shall be needed in the constructive solution of new and untried problems. It must represent the initiative that is competent to adapt means to ends in the solution of such problems. And, beyond all this, it must represent ideals — those intangible forces that can lift a race in a single century through a greater distance than it has traversed in all preceding ages. Every teacher who comes in contact with the plastic material that we designate as childhood and youth can add a touch to this creative process — can influence definitely, tangibly, unerringly, the type of manhood and womanhood that is to dominate the succeeding generation.

APPENDIX A

SUGGESTIONS FOR THE STUDY OF CLASSROOM TECHNIQUE THROUGH OBSERVATION

COURSES in the observation of classroom work are to be found in the curricula of practically all normal schools. They are also coming into favor in the universities that offer instruction in the theory and practice of education. It is the writer's belief that observation of expert teaching forms an indispensable part of the candidate's training. His own experience in normal school work of different types has offered opportunities for comparisons, and has led him to conclude that the students who enter upon their practice teaching after a systematic course of observation under supervision do much better work at the outset, make fewer mistakes, and apply their theoretical pedagogy more effectively than the students who go to practice without this preparatory observation.

It seems to be tolerably certain that the beginning teacher follows, in his first efforts, some concrete model of teaching. The most common procedure is to imitate one's own instructors. If these instructors are engaged in teaching relatively mature students, it is obvious that their technique will not always be adapted to the pupils in the lower grades. The most frequent cause of failure among college graduates who go into elementary and secondary teaching is admittedly the tendency of such beginners to employ college methods in their instruction.[1]

If the beginner does not imitate the instructors from whose

[1] Cf. some statistics upon this point gathered by Professor M. V. O'Shea published in *School Review*, 1902, vol. x, pp. 778 ff.

classrooms he has just come, the chances are that he will imitate his earlier teachers in so far as he can recall the methods and devices that they employed. In some cases, this will result in the initiation of valuable habits of technique; more frequently, however, the formation of good habits is impeded rather than helped by this process.

A third procedure, which is rarely met with in actual practice, is the adjustment of the teacher to his new work on the basis of the principles that he has assimilated during his study of theoretical pedagogy — "general method" and "special methods." This is a rare procedure in the beginner, because it involves the operation of the conceptual judgment. The line of least resistance is to solve a new situation by a practical judgment — by the conscious recall of a concrete experience and an imitative adjustment, copying, as faithfully as may be, the details of this recalled experience. As a matter of fact, the connection between theory and practice is very seldom made by the beginning teacher, *unless the theoretical instruction has been imparted in a manner that will enable the student vividly to associate with each principle a concrete image of its practical application in the classroom.* Many students complete with high honor strenuous courses in psychology and in educational theory, and then proceed as quickly as possible to forget what they have acquired, because they can find in actual school work no instance of the application of the facts and principles that they have learned.[1]

A practicable — and, in the writer's experience, a most

[1] In this connection it is interesting to note the strangely inconsistent policy in normal school practice which insists that the student shall first study abstract theory and then note its application, while the very first principle that the theory itself teaches is that education must proceed from the concrete to the abstract, and from cases to principles.

successful — solution of this problem is to parallel the courses in psychology and educational theory with such observation of actual classroom work as will illustrate the principles and precepts as they are developed. In this way an immediate connection is made between the principles and the cases upon which they rest, and the student is supplied with concrete images of classroom technique which he can apply when he begins his practice teaching.

General Principles of Observation. — It is a fallacy of educational theory to look upon the study of concrete cases as intrinsically easier and less fatiguing than the study of general principles. Objective teaching is, by far, the most difficult form of teaching. It is easy, indeed, to watch objective processes that are novel and for that reason attractive from the standpoint of passive attention; but to obtain from objective study anything of real value requires the closest sort of concentration and a marked degree of sustained attention. Simply sending students to an elementary classroom with instructions to "observe" the work of the teacher is a good way to begin, but it cannot be profitably employed after one or two visits. The matter must be taken up systematically and attacked aggressively, if a measurable value is to accrue to the time and energy expended in the work.

The following principles and cautions are suggested for the conduct of courses in observation: —

(1) If possible, observation should accompany all work in educational theory, including psychology, general method, special methods, school hygiene, and school management.

(2) If it is not practicable to devote so much time to observation, it should be given just prior to the beginning of practice; in other words, the concrete images will be less effectively recalled

if a period of long duration intervenes between the observation and the practice.

(3) Classrooms selected for observation should be in charge of teachers whose work can be honestly commended.

(4) The observing students should be cautioned at the outset that their duty is to learn and not to criticise. The good points should be constantly emphasized. Even the best of teachers will sometimes make mistakes, and it requires very little experience or mental acumen to find fault. The hypercritical attitude should be discouraged from the very first.

(5) The teachers whose classrooms are visited should thoroughly understand that the purpose of visitation is not critical. Otherwise they will almost invariably become self-conscious and fail to do their best.

(6) Only occasionally should a teacher be asked to rearrange his program for the sake of providing exercises for the observation classes. Observators can find almost every principle of education illustrated in any school exercise.

(7) The instructor should at first accompany the sections to the class under observation, and provide for a subsequent period to discuss the points noted. After four or five observations made in this way, syllabi may be used and written reports required.

(8) Observation sections should be limited to the smallest possible number of students; certainly not more than ten should visit an elementary classroom of the average size at one time.[1] When syllabi are used, observators can go to classrooms alone or in pairs.

[1] In some of the recently constructed training school buildings, amphitheaters are provided for the presentation of model lessons. This plan, however, should not exclude observation in the regular classrooms, where pupils work under normal conditions.

(9) The first observation may be rather general in its nature, but each subsequent observation should concentrate upon one or two particular phases of class work.

(10) The writer has found it advisable to require an examination at the close of each course in observation. This encourages students to take the work seriously, and furnishes an additional incentive for attacking the problem aggressively. It is also valuable in that it requires a review of the important points and a revival of significant images just prior to the beginning of practice.

An Outline for a Ten Weeks' Course in Observation. — The following outline is intended merely to suggest a general plan of treatment. It is based upon a forty weeks' course given during four successive years at the Montana State Normal College, and upon a twenty weeks' course given during the present year (1906–1907) at the Oswego State Normal School,[1] — one period a week being devoted to the work in each case. It is, however, limited to such phases of observation work as might well be undertaken in connection with a course on classroom management. The same general plan can be profitably applied in connection with courses in psychology and general educational theory.

First Period

This may profitably be devoted to an explanation of the purpose of the course, especial emphasis being laid upon the conduct of the observators while in the classroom, the attitude

[1] The writer is indebted to Superintendent C. L. Robbins, of the Training Department of the Montana Normal College, for many of the questions presented in the syllabi. He has also received valuable suggestions from Superintendent W. B. Mooney of the South Dakota State Normal School (Spearfish), and from Professor Guy Montrose Whipple, of Cornell University.

toward the work, the value that may be derived from it, and the details of note-taking and summarizing the points observed.

Second Period. General Observation

The students are instructed to note the four points concerning the work of the classroom that make the most distinct impression upon them. The observation should be followed by a discussion in which each student reports upon the points noted, stating in each case the reasons for believing them to be significant. At the close of this discussion, the instructor should state the topic for the following observation, and furnish references that will enable the student to refresh his memory concerning the principles that are to be illustrated.

Third Period. General Topic: Attention

(For this and subsequent observation periods, a syllabus of questions, similar to the following, may be profitably employed. This does not, of course, preclude subsequent discussion. It will be noted that the questions given below are applicable to the work of practically any classroom at any period. This makes systematic observation possible without at the same time requiring a special order of exercises in the classroom under observation.)

General Data: Classroom Observed. Grades Represented. Exercises Seen. Date and Hour

Observe first the study class. How would you characterize the attention of the pupils? What proportion of the pupils are giving strenuous attention? How do you judge whether a pupil is attentive or inattentive?

Is the attention in general of the passive, active, or secondary passive variety? How can you tell? Note any exceptions.

If you detect any instances of primary passive attention, can you determine the instinct that is operative?

In cases of active attention, what appears to be the motive or incentive? Give reasons for your answer.

Note any lapses in the attention of particular pupils. Can you discover in each case the cause of the lapse? What seem to be the most common distractions?

Can you detect any rhythms of attention? If so, how frequently do they occur?

Has the teacher provided any objective aids to attention, — study questions, topics, etc.? What is their effect?

Does the teacher give directions or admonitions to the study class? Is the teacher's attention distracted from the recitation by pupils in the study class?

If possible, compare the attention of pupils who are writing with that of pupils who are studying lessons out of text-books.

Observe the reciting class. What proportion of the pupils appear to be giving attention to the lesson? What are the evidences of this attention?

Compare the attention of the reciting class with that of the study class. In which case is the attention more strongly concentrated? In which is it the longer sustained? Can you give any reasons for the differences that you note?

What is the character of the attention in the reciting class, — active, passive, secondary passive? Note any exceptions to the general rule.

What does the teacher do to revive attention when it lags? Note any change of method or device that makes for improved attention.

What are the most disturbing distractions in the reciting class?

Fourth Period. General Topic: Habit

Note as many completely formed physical habits as you can discover in the pupils.

Do you discover any physical habits in the process of formation? How can you tell that they are not "full-fledged"?

Note habits of speech. Do the pupils articulate distinctly? Do they do this as a matter of habit? What steps are taken to improve habits of articulation and enunciation?

What grammatical errors can you discover that seem to be matters of habit? What correct forms are evidently still in the judgment stage? Does the teacher attempt to break up inadequate habits by correcting mistakes? What effect does this have upon the pupil corrected? (Note actual conditions.)

Note the writing of pupils. Are good form of letters, correct spacing, good alignment, and adequate arrangement matters of habit, or are they obtained through judgment processes? Are the results in writing uniform throughout the class, or is there a wide variation among individual pupils?

Note the blackboard work. If inadequate in any way, can you determine just what details need further treatment from the standpoint of habit-forming, — size of letters, uniformity in size of letters, vertical alignment, horizontal alignment, spacing, etc.?

In the work in arithmetic and spelling, what habits are still in the formative stage of development? What number facts and word-forms seem to be thoroughly automatic? How do you judge?

Note the points in the teacher's technique that seem to have especial reference to the building of adequate habits or the breaking-up of inadequate habits. Give instances which show the application of the law of habit-building.

Fifth Period. General Topic: Classroom Routine

Note the mechanics of the classroom. Note, first, the general appearance of the room. Is it orderly and well arranged? If so, try to discover some of the elements that go to make up the "total impression" that it makes upon you — clean floors, well-arranged tables, a place for everything and everything in its place, etc.

Do the pupils rise quickly when called upon? Do they stand in the center of the aisle without leaning? Do they always arise upon the same side of the desk?

Note the movement of lines. If the pupils rise together, describe the signals that are used to initiate the movement.

Note the manner in which pupils pass to the board. Have the necessary movements been reduced to habit? Is there any confusion or disorder in the movement that might be eliminated by forming specific habits?

If tablets, books, or other materials are distributed or collected, note the mechanism of the process. Can you detect any point at which a bit of established routine would save time or prevent disorder?

Note the precautions taken to have materials for general use in readiness — crayon and erasers at the blackboard, ink at the desks, etc.

Is the teacher initiating any new routine? If so, describe the method employed. How does it illustrate the law of habit-building?

Sixth Period. General Topic: Discipline

Note the class not reciting. Are any of the pupils engaged in activities not connected with their assigned work? Do these activities disturb other pupils? What seems to be the most serious source of disturbance? How seriously does it affect the work of the class as a whole?

Would you judge the disturbance to be willful and intentional, or accidental and unintentional? How can you tell?

Do the pupils who are not disturbing others appear to be consciously inhibiting impulses that would cause disturbance, or is inhibition a matter of habit?

If pupils are consciously inhibiting impulses, what appears to be the motive or incentive for such inhibition? What effect does conscious inhibition have upon the regular work of the pupils?

What is the attitude of other pupils toward the one who disturbs them? Does disorder tend to "spread" among neighboring pupils?

What measures does the teacher take to preserve discipline in the study class? Are they effective?

Observe the reciting class. How does the "order" compare with that of the study class?

What general disturbances are caused by lack of control on the part of individual pupils? How are these treated by the teacher?

Do you note any instances of "volitional action" (conflict between impulses or between an impulse and an idea)? If so, describe a typical case.

In what way does the teacher encourage right choices in cases of volitional action?

What penalties are imposed for misdemeanors? What is their effect so far as you can observe?

Seventh Period. General Topic: Affective Qualities

Is the general tone of the classroom pleasant, unpleasant, or indifferent? How do you determine this?

Can you ascribe the general condition to any specific cause, — subject-matter studied, method of presentation, physical conditions such as heating, lighting, ventilation, time of day, previous exercises?

What is the effect of the "tone" of the room upon the pupils' work? Does it make them more or less attentive? Does it seem to impede or accelerate memory, judgment, reasoning?

Do you notice particular cases of any pronounced *emotion* among the pupils, — joy, grief, hope, satisfaction, disappointment, sympathy, antipathy, delight? (Take a particular case and describe it in detail, noting the cause, the physiological expressions, and the effect upon the pupil's work and upon the work of other pupils.)

Note particularly any cases of extreme depression or extreme buoyancy. What appears to be the cause? How does the condition express itself, — inertia, light breathing, general relaxation; activity, suffusion of blood to the capillaries, high tension, rigidity, etc.?

Does the predominant "tone" of the room appear to have any effect upon the teacher? Does the teacher take advantage of any specific emotion or mood appearing in a particular pupil?

What is the dominant "tone" of the teacher? What is the

effect of this upon the instruction? Upon the pupils? Do you notice any "contagion" of mood or emotion?

Eighth Period. General Topic: Hygiene

Note the sitting posture of the pupils. What proportion are in an adequate sitting position? Can you see any permanent effects in individual children of bad sitting posture, — curvature of the spine, round shoulders, depressed head, etc.?

Are the seats so arranged and adjusted that all pupils can assume a correct position? What proportion of the pupils are "hung up"? What proportion have desks that are too high? Too low?

Can you by looking over the class notice any pupils who have defects of vision? How do you judge in each case?

Is there any evidence that any pupils are defective in hearing? What special measures does the teacher take to aid such pupils?

What proportion of the pupils appear to be anæmic? Compare the work of these pupils with that of the others. Are they listless, relaxed, inattentive; or nervous, high-strung, and "fidgety"? Note their manner of standing, their recitation work, and their general affective tone.

Would you class any of the pupils as "mouth breathers"? If you find such cases, compare them with the other pupils as to ability to sustain attention, ability to concentrate, general mental ability, affective tone, and temper.

Note the lighting of the room. Does the light come exclusively from the left? If it comes from other directions, can you note any bad effects in the way of cross-shadows, etc.? Does

inadequate lighting appear to affect the "tone" of the room?

Is the temperature uniform or variable? If variable, note the effect of changes in temperature upon the pupils and upon the work.

Note any signs of fatigue. Can you distinguish cases that appear to be real fatigue from those that appear to be merely *ennui?*

Note the effect of slight changes in methods and devices upon apparent fatigue. What does the teacher do to provide a partial restitution of energy? If pupils are given gymnastic exercises, note the result on the work. If free play is permitted or if "rest periods" are provided, note the result.

What provision has been made for ventilation? Does it appear to be effective? Note any disastrous consequences that seem to be the result of bad ventilation. If windows are opened and the air is changed, note the effect upon the pupils and upon the work.

Ninth Period. General Topic: Technique of Instruction

What assignments were given? Note the amount of time spent in assignments.

What lesson type is represented by the assignment? (Inductive or deductive development, preliminary focalization preparatory to drill lesson, etc.)

Describe in detail the method of the assignment.

Were the functions of the assignment fulfilled? (Did the assignment clear up relatively insuperable difficulties and create an interest in the new lesson?)

What effect did the assignment have upon the subsequent study period?

Were devices employed to make the seat-work effective? (Did the teacher provide blackboard questions, topics, objective exercises, problems to be solved?) What were the effects of these devices upon the study class?

What recitations did you hear? Could the recitations be classified according to lesson type? (Development lesson, review lesson, drill lesson.)

If a recitation can be definitely classified as to type, describe how the technique of the lesson was adapted to fulfill the function of the type represented. (If a review lesson, the function of organization; if a drill lesson, the function of habit-building; if an inductive development lesson, the function of establishing a general principle, rule, or definition; if a deductive development lesson, the function of anticipating experience or explaining facts.)

Tenth Period. General Topic: Technique of Instruction

Note time devoted to assignment, and describe the methods employed in assignment.

Observe especially the recitation. Classify according to lesson type.

Would you characterize the recitation as "question-and-answer" or "topical"? Which of these two varieties is demanded by the lesson type represented?

Are all of the pupils attentive to all of the questions and topics? What precautions does the teacher take to insure such attention?

Are "pumping" questions employed? Are they justified by the lesson type?

Are the questions broad and general or specific and pointed? Give instances.

Are the questions asked in a logical sequence, or is the connection between successive questions slight? In either case, is the procedure consistent with the lesson type? (In a drill lesson, for example, logical sequence of questions is not so important as in a development or a review lesson.)

If the recitation is topical, note the character of the topics stated. Are they broad and comprehensive, or narrowly limited? Are subsidiary points included in the statement of the topics, or does the teacher expect the pupil to have these so well in mind that the statement of the general topic suggests them?

How would you characterize the topical recitations of the pupils? (Are they coherent and well organized, or loose and disjointed?) Do the pupils discuss the topic in such a way that the necessary thought-connections are clearly brought out?

Does the teacher "prompt" the pupils in recitation? If so, describe a typical case. Is the reciting pupil ever interrupted in the course of a recitation in order that another may proceed with the discussion? What effect does this have upon the attention of the class?

Does the recitation close with a summary? If so, describe the method of summarizing.

APPENDIX B

PUPIL-GOVERNMENT AND THE SCHOOL CITY

MANY attempts have been made within the past ten years to establish the principle of self-government in the school community. Many of these plans have through premature newspaper exploitation won an ephemeral notoriety, which the subsequent results have failed to justify. Others have met with a measure of success that would seem to indicate that there is something to be said in favor of pupil-government, at least in the upper grades of the elementary school and in the high school.

Probably the most notable instance of a democratic juvenile community is the "George Junior Republic," of Freeville, New York. This "Republic" is peopled mainly by waifs rescued from the streets of New York City. It provides a community life, partly self-supporting through the labor of the "citizens," and almost entirely self-governing. The members of the community elect their own legislature, their police justices, their executive officers. The laws are rigidly enforced, and penalties, among which the most serious is actual imprisonment at hard labor and on a very plain diet, are extremely effective. How much of the success of the George Junior Republic is due to the dominant and inspiring personality of its founder, it would be difficult to determine, but that some credit must be given to the principles that are involved is hardly to be doubted. It is not clear, however, that the same principles would operate with equal efficiency in all schools. The "citizens" of the George Junior Republic are different from the average child in that they have been accustomed to take initiative and to

assume responsibility almost from infancy. As a result, they are prematurely developed in a great many directions.

The "School City" is perhaps the most successful form of self-government in schools existing under normal conditions and catering to the needs of normal children. The establishment of a school city is almost invariably successful at the outset — for the simple reason, of course, that anything that is novel, and especially anything that involves self-activity, will always appeal to children. When the novelty begins to "wear off," however, the duties involved in self-government become as irksome as any other duties, and, unless upheld by a strong head, the school city soon lapses, and the reins of government are again assumed by the principal and teachers. Nevertheless, while it lasts, the school city may be a very valuable object-lesson in the mechanics of a democratic government, and it is this feature more than any other that strongly recommends the general plan.

The following "Charter" may be suggestive to those who wish to try the experiment. It was framed by Principal Norman Strong, of the Arsenal School, Hartford, Conn., after a very careful study of the whole problem, — and, it should be added, with a full recognition of the general limitations of pupil-government. It is now in operation in the Arsenal School, and has thus far proved to be successful. The writer is indebted to Principal Strong for permission to reprint the charter here.

CHARTER OF THE ARSENAL SCHOOL CITY, HARTFORD, CONN.

The committee and faculty of the Arsenal School, Hartford, Conn., do hereby create the Arsenal School City, granting

the following charter and delegating the necessary powers to carry out its provisions.

Article I. Citizens and Jurisdiction

Section I. The citizens of the Arsenal School City shall consist of the pupils above Grade III in the main building, their teachers, and the principal of the school.

Section II. Its jurisdiction shall extend to all parts of the school property, with the exception of the classroom. This jurisdiction may be extended to the classroom by a two-thirds vote of all the pupils registered and by the consent of the principal and the teacher. A notice of such action shall be sent to the city clerk.

Article II. Powers and Duties

Section I. The Arsenal School City shall be a body politic with legislative and judicial powers, within bounds, and in harmony with, the Constitution of the United States and the Constitution of the State of Connecticut.

Section II. The City shall have the right to nominate and elect officers for its government.

Section III. It shall be the duty of its citizens and its officials to maintain such order as is necessary for the best interests of school life; to become thoroughly familiar with their city charter; to secure justice to every citizen; and to enforce as laws, all ordinances that shall be made by its legislative body, and such rules and regulations as have been established in the school either through custom or by the direction of the principal.

Section IV. It shall be the special duty of the city officials to inform themselves as to the duties of their office by reading, and by questioning those most able to give them information.

Article III. Legislative Department

Section I. The legislative body shall consist of the citizens of the city.

Section II. A bill to become a law must pass through the following stages: —

1. It shall be presented by any citizen to the mayor and principal, who shall, if they think it is a proper bill to come before the voters of the city, direct the city clerk to post it.

2. It shall be posted for five school days.

3. On the school day following the last day that the bill is posted, the citizens, as they pass out to recess, shall cast their ballots in their respective rooms. They shall vote "yes" if they favor the bill, and "no" if they oppose it.

4. During the recess of the day aforesaid, the ballots shall be counted and a certified record of the result be sent to the city clerk. Two counters and two inspectors shall be previously chosen.

5. The city clerk, with the mayor and the judge of the city court as inspectors, shall summarize the ballots.

6. If the bill shall receive a majority of all the votes cast and the signatures of the mayor and principal, it shall become a city ordinance.

Article IV. The Legislative Department

Section I. The executive officers shall be a mayor, a chief-of-police, and a city clerk, elected for one school term.

Section II. Duties of the Mayor. Clause 1. The mayor shall be the chief executive officer and, in case of his temporary disability, absence, or removal, his duties shall devolve upon the following officers in the order given: chief-of-police, town clerk.

Clause 2. He shall appoint with the consent and advice of the principal and the chief-of-police, such police officers as he thinks necessary for the maintenance of order.

Clause 3. Police officers having control of corridors, cloak rooms, and basements shall be appointed upon the advice of the classes using said parts of the building. (See Art. VI, Sect. VI.)

Clause 4. The mayor shall communicate during the first week of the term at a public meeting or meetings the condition of the city and make recommendations for its improvement.

Section III. Duties of the Chief-of-Police. Clause 1. The chief-of-police shall have general charge of the police force.

Clause 2. It shall be the duty of the chief-of-police to bring all persons before the City Court and the Court of Appeals on the order of the prosecuting attorney.

Section IV. Duties of the City Clerk. Clause 1. The city clerk shall be the custodian of all city property, keep the records of the city and post the same. These records shall include the following: (1) results of all elections; (2) the ballot on all bills; (3) all city ordinances; (4) a complete record of nominating conventions; (5) a record of all classrooms that pass under the jurisdiction of the city government.

Clause 2. He shall have power to administer the oath of office to the city officials.

Clause 3. He shall appoint, with the advice and consent of the mayor and principal, an assistant city clerk.

Article V. The Judicial Department

Section I. The judicial department shall consist of the City Court and the Court of Appeals.

Section II. The City Court. Clause 1. The City Court shall

have original jurisdiction over all cases of violation of the laws of the city.

Clause 2. The officials of the City Court shall be a judge and a prosecuting attorney elected by the city, and a clerk of the court, appointed by the judge, with the advice and consent of the mayor and principal.

Clause 3. It shall be the duty of the judge to preside at all sessions of the City Court, to discharge all persons found not guilty, and to sentence those found guilty. To become operative, a sentence must receive the written approval of the principal, or a teacher authorized by him.

Clause 4. The pupil associate judge of the Court of Appeals shall preside over the City Court during the temporary absence or disability of the judge of the City Court.

Clause 5. Any person aggrieved by the judgment of the City Court shall have the right of appeal to the higher court.

Clause 6. The jurisdiction of the City Court as to penalties may be limited by the ordinances of the legislative department and in all cases where no penalty is prescribed by ordinance, the court shall impose such penalty as it deems just and equitable, subject to the right of appeal as aforesaid.

Clause 7. It shall be the duty of the prosecuting attorney to prosecute before the City Court (and the higher court when an appeal is made) all violations of the laws of the city.

Clause 8. It shall be the duty of the clerk of the City Court to keep all records of persons brought before the court as follows: the defendant's name, his offense, by whom arrested, defendant's plea, the defendant's attorney, the witnesses for and against, the decision and penalty imposed by the court and the appeal. (He shall also be clerk of the Court of Appeals and record its decisions.)

Clause 9. The principal or a teacher authorized by him shall be present as an adviser at each session of the City Court.

Section III. The Court of Appeals. Clause 1. The Court of Appeals shall consist of the chief justice, who shall be the principal, and two associate justices, a teacher, and a pupil elected by the city for one school term.

Clause 2. The Court of Appeals shall have appellate and final jurisdiction on all cases brought to it on appeal from the City Court, and original jurisdiction over all applications to it for the removal from office of any of the officials of the city.

Clause 3. The prosecuting attorney, clerk of the City Court, and chief-of-police shall also be officials of the Court of Appeals when it is in session. (See Art. V, Sect. III, Clauses 7, 8, and 9.)

Clause 4. The sessions of the Court of Appeals shall be subject to the call of the chief justice.

ARTICLE VI. THE NOMINATION AND ELECTION OF OFFICERS

Section I. The Delegates. Just prior to dismissal on the afternoon of the Monday of the last full week of school in each school term, each room of the Arsenal School City shall elect a boy and a girl as delegates to a nominating convention and send a certified list of the same to the city clerk.

Section II. The Convention. Clause 1. On the following Tuesday at 3.30, these delegates shall meet in convention and shall nominate two candidates for each of the following officers in the order given: mayor, chief-of-police, judge of the City Court, prosecuting attorney, a teacher and pupil as associate justices of the Court of Appeals, and a city clerk.

Clause 2. The city clerk shall call the convention to order, and a chairman shall be elected. The chairman shall direct

the city clerk to call the roll of the delegates from his certified lists. The convention shall then proceed to nominate candidates.

Clause 3. The principal or a teacher authorized by him shall be present as an adviser during the session of the convention.

Section III. The Election. Clause 1. Just prior to the dismissal on the afternoon of the Thursday of the last full week of each school term, ballots shall be cast in each room for the candidates, and a certified record of the result sent to the city clerk. Previous to the election, two counters and two inspectors of election shall be chosen.

Clause 2. The city clerk shall summarize the ballots, with the mayor and judge of the City Court as inspectors.

Clause 3. The officials receiving a majority of all votes cast shall be elected.

Section IV. Term of Office. Clause 1. The term of office of all city officials shall be for one school term and until their successors are installed unless otherwise provided for.

Clause 2. The installation of officers shall take place at such time and place as the principal may arrange.

Section V. Vacancies Filled. All vacancies in office, unless otherwise provided for, shall be filled by the mayor with the advice and consent of the principal.

Section VI. The First Election. The first election shall take place at the call of the principal.

Section VII. Police Officers. Clause 1. Each room shall choose on the last day of each calendar month three boys and three girls, and shall send a list of the same to the mayor. (See Art. IV, Sect. II.)

Clause 2. The term of office of a police officer shall be for one calendar month and until his successor is installed.

Clause 3. The first and most important duty of a police officer shall be to prevent a violation of the laws.

Clause 4. A police officer shall make an arrest by serving upon an offender the following warrant: —

Date.....19....

To.....

You are hereby accused of violating a law of the Arsenal School City and are summoned to appear before the next session of the City Court.

Offense.....

Signed..... *Police Officer*

Clause 5. A duplicate of the above shall be sent by the police officer to the prosecuting attorney at the time of the arrest.

Clause 6. Before assuming the duties of office, officials shall take the following oath: —

"You do solemnly promise that you will perform with patience and courtesy the duties of the office of..... and will, to the best of your ability, preserve, protect, and defend the interests of the Arsenal School City."

Article VII. Amendments

Amendments to this charter shall be made in the same way that city ordinances are enacted, with the exception that they shall receive a three-fourths vote of all ballots cast. (See Art. III.)

Article VIII

This charter shall become operative by the three-fourths vote of the city, and shall become inoperative at the close of any term by a majority vote of the teachers having classrooms in the Arsenal School City.

APPENDIX C

THE "SPRINGFIELD QUESTIONS" IN ARITHMETIC

In 1909 a set of examination papers written by ninth grade pupils in 1846 was found in one of the grammar school buildings of Springfield, Mass. The questions were given to an eighth grade class in the same school for the purpose of comparing the results in arithmetic under the older methods of teaching with the results obtained under contemporary methods. In several other schools throughout the country the same questions have been given, and it is generally agreed that they form a very fair test of what pupils should know of arithmetical processes at the close of the elementary course. They are accordingly reprinted below, together with the standings attained by the earlier class and by present-day classes: —

"1. Add together the following numbers: Three thousand and nine, twenty-nine, one, three hundred and one, sixty-one, sixteen, seven hundred and two, nine thousand, nineteen and a half, one and a half.

"2. Multiply 10,002 by 8009.

"3. In a town five miles wide and six miles long, how many acres?

"4. How many steps of two and a half feet each will a person take in walking one mile?

"5. What is one third of $175\frac{1}{2}$?

"6. A boy bought three dozen of oranges for $37\frac{1}{2}$ cents, and sold them for $1\frac{1}{2}$ cents apiece; what would he have gained if he had sold them for $2\frac{1}{2}$ cents apiece?

"7. There is a certain number, one third of which exceeds one fourth of it by two; what is the number?

"8. What is the simple interest of $1200 for 12 years, 11 months, and 29 days, at six per cent?"

The class of eighty-five pupils who underwent this examination in 1846 averaged 29.4 per cent. In 1905, the eighth grade Springfield class averaged 65.5 per cent, and a class at Frankfort, Ind., 62.2 per cent.

APPENDIX D

PUPILS' WRITTEN WORK AS AN INDEX OF GROWTH

THE following plates are reproductions (reduced in size) of papers produced by pupils in the elementary grades. They are inserted here as possibly suggestive to the beginning teacher of the quality of written work that may be expected from pupils in the grades indicated.

PLATE I shows the improvement made in form (arrangement, alignment, neatness, and good writing) in a period of four months. Similar results were secured from the other members of the class. (Grade III "B.")

PLATE II and PLATE III also show the growth that may be made within comparatively brief periods of time. The first paper represented in PLATE II is typical of the rather careless work often accepted as the best that a pupil can do. The second paper, written two months afterward, shows a noticeable improvement in matters of form. The first paper of PLATE III reveals a deterioration in form, due to the introduction of a new process (the "long" method of division). The second paper, produced three weeks later, shows recovery from the deterioration, and also a measurable improvement over the second paper of PLATE II.

PLATES IV–XIII represent types of written work for the various grades. They are reproduced from papers selected from complete "sets" comprising the work of entire classes. In every case, the paper is a "first draft," that is, there has

been no correction or rewriting. The object is to show, not the most "finished" results, but the results that can be expected from the pupils, day in and day out, as a matter of habit. In every case, the paper reproduced is fairly typical of the set from which it is taken. The papers represent schools in all parts of the United States — the East, the Middle West, the South, and the Far West. The presence of certain content in any paper does not, of course, imply that the writer necessarily indorses such content for the grade in question. The suggestions printed under the cuts indicate possible lines of improvement.

September. 1 Harold

451	76	95	32	254	352	
+231	+87	+68	-11	181	125	
682	162	11	321	+544	+410	
				899	887	

Harold
Jan. 18, 1907.

United States Money.
10 mills = 1 cent.
10 cents = 1 dime.
10 dimes = 1 dollar.

1,600	1,806
16	403
5,032	14
+4221	+8,010
10,869	10,238

PLATE I. — Showing Growth in Form Habits from September to January (Grade III "B.") (Note particularly the improvement in form of figures and in vertical and horizontal alignment.)

Robert
Dec 6 1906

68	415	916
x13	x25	x34
204	2075	3664
+68	+830	+2748
884	10375	31144

86	925	$96.54
x25	x15	12.48
430	4625	65.84
+172	+925	+12.56
2150	13875	$187.42

100

Robert
Jan. 3, 1907

4 152 84	2 13450	6 118846
1321	1725	3141

5 162 55	3 115819	5 165105
1251	5273	13021.

I How many hours in 12 days?

24 (hours)
x12
48
24
288 (hours)

II How many pecks in 5 bushels?

20 pecks.

III If one hat costs x how much.

PLATE II.—Showing Growth in Form Habits from November to January (Grade III "B.")

Robert

```
   1342        1723        1
4 ) 5368    3 ) 5169    4 ) 6528
    4           3           4
    13          21          2
    12          21
     16          6
     16          6
      8          9
      8          9
```

100

Robert
Feb. 12

```
 4732      7485       692
-1819     -4739      X56
 2913      2746      4152
                    +3460
                    38752

 849
 X64
 3396      6 ) 64842   5 ) 3750
+5094        10807       750
 54336
```

PLATE III.—Showing (*a*) Deterioration in Form on Introduction of New Process; (*b*) Recovery from Deterioration. (Grade III "B.")

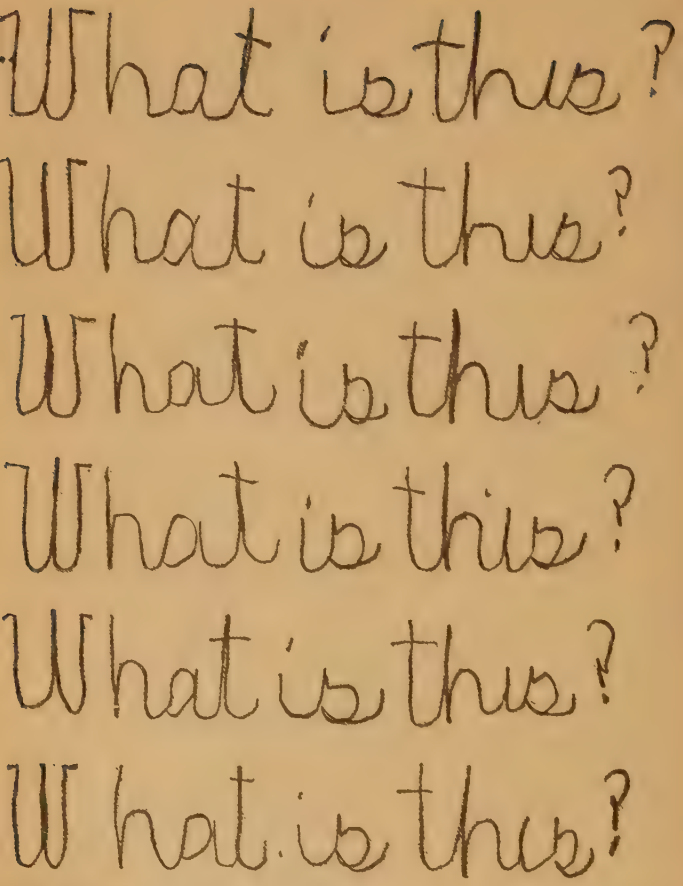


PLATE IV. — Type of Work from First Grade Pupils just Learning to Write

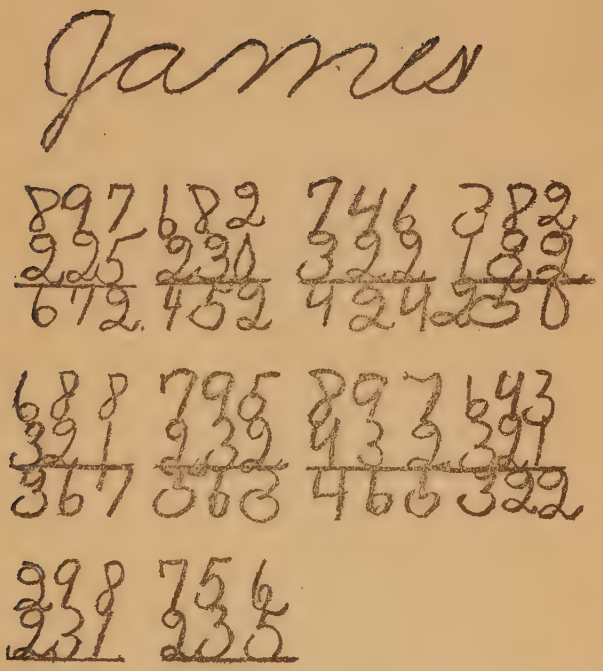


PLATE V. — A Type of First Grade Work. (Rather crowded and some figures not well-formed.)

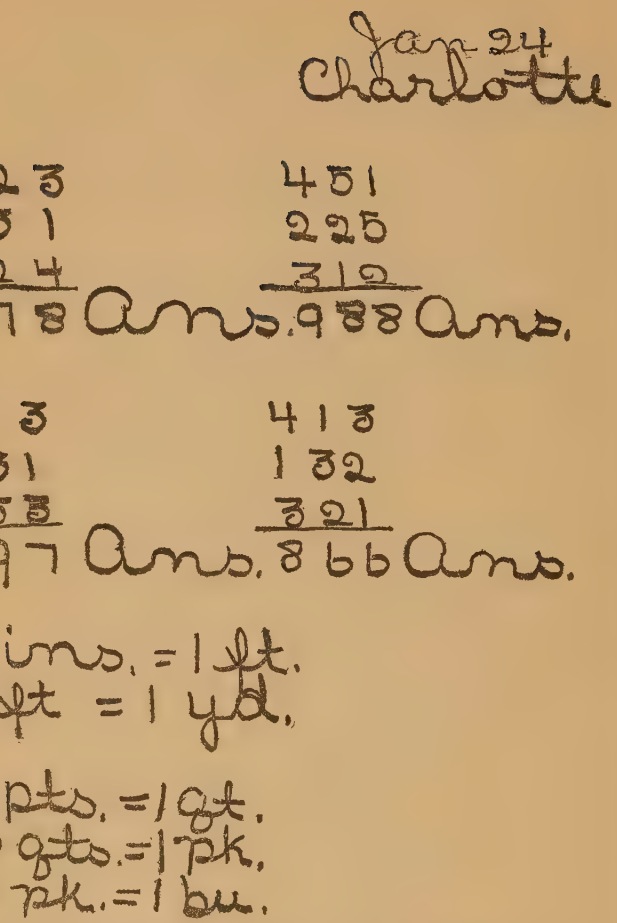
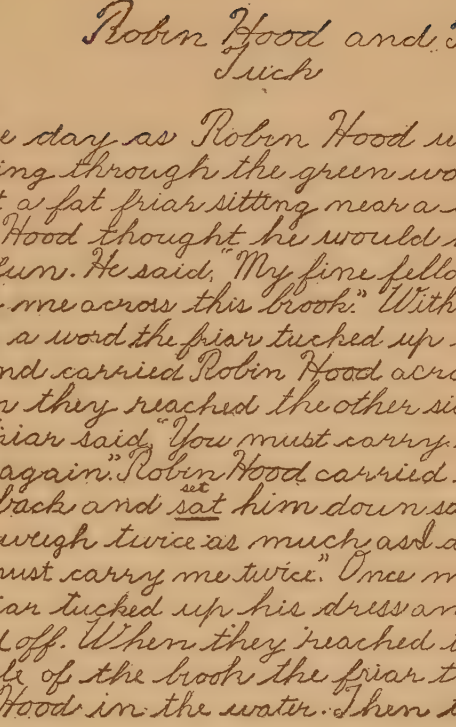


PLATE VI.—An Average Paper selected from a II "B" Number Set. (Note a "backhand" tendency that needs correction.)



Robin Hood and Friar Tuck

One day as Robin Hood was walking through the green woods he met a fat friar sitting near a brook. Robin Hood thought he would have some fun. He said, "My fine fellow, carry me across this brook." Without saying a word the friar tucked up his dress and carried Robin Hood across. When they reached the other side the friar said, "You must carry me back again." Robin Hood carried the friar back and set him down saying, "You weigh twice as much as I do so you must carry me twice." Once more the friar tucked up his dress and started off. When they reached the middle of the brook the friar threw Robin Hood in the water. Then the

PLATE VII. — A "Story" Paper from Grade III "A." (More uniform slant and wider spacing would improve the paper.)

Fourth Grade
Monday. Nov 12.
Harry Kendall

The Rio Grande river rises in the southwestern part of Colorado, in the Rocky mountains, flows south, then southeast and empties into the Gulf of Mexico.

The Colorado river rises in the western part of Wyoming in the Rocky mountains,

PLATE VIII. — An Average Fourth Grade Paper showing "Medium Slant" Penmanship. (Margin needs correction.)

B Arithmetic.

Thelma Riley: Dec. 7. 1906

I

$\frac{3}{8}$ of a farm is worth $1728.

$\frac{1}{8}$ of the " " " $576.

$\frac{8}{8}$ or the farm is worth $4608.

II

$4\frac{3}{7}$ Mi. = how far he walks is 1 hr.

9 hr. = how long he walked.

$9 \times 4\frac{3}{7}$ Mi. $= 39\frac{6}{7}$ Mi = how far he walks in 9 hrs.

III

$\frac{3}{4}¢$ = cost of 1 ft of wire.

$1.26 = 126¢$ = amt of money.

To: 126¢ as many ft. of wire can be bought as $126¢ \div \frac{3}{4}¢ = \frac{504¢}{4} \div \frac{3}{4}¢ = 168 =$ No. of feet of wire.

PLATE IX. — Arithmetic Paper from Grade V "B." (Lack of uniformity in height of letters and figures is the chief defect.)

Junior.
Room 28.

Edgar Smith.
May. 11, 1905.

Ulysses on the Island of the Sun.

Ulysses' men rowed on and on until they saw some sheep and kine and the men wanted to get some of the kine so they rowed to the shore and Ulysses said, "Hear my words, my men that I may declare unto you the oracles of Tiresias and of Circe, who charged me to shun this isle. For there she said the most dreadful mischief would befall us. Nay, drive ye then the black ship and past that Isle."

Then Eurylochus said, "Thou art very strong Ulysses and thy limbs are never weary, but we are worn out with toil. Let us stop on shore and prepare our evening meal, and have a good night's rest, and then tomorrow we will sail again."

Ulysses made the men make a solemn oath that they would not touch the cattle and they made the solemn oath and then they landed.

PLATE X.—A "Story" Paper from Grade V "A." (Lines too close together; spaces should be wider between words.)

5. Reduce - 3 yd. 2 ft. 5 in. to in.

1 yd. = 3 ft.

3 yd. = 3 × 3 ft. = 9 ft.

9 ft. + 2 ft. = 11 ft.

1 ft = 12 in.

11 ft. = 11 × 12 in. = 132 in.

132 in. + 5 in. = 137 in.

Reduce - 4 rd. 1 yd. 2 ft. to ft.

1 rd. = 5½ yd.

4 rd. = 4 × 5½ yd. = 22 yd.

22 yd. + 1 yd. = 23 yd.

1 yd. = 3 ft.

23 yd. = 23 × 3 ft. = 69 ft.

69 ft. + 2 ft. = 71 ft.

PLATE XI. — An Arithmetic Paper from Grade VI "A." (Note vertical alignment.)

Shepard School. February 5, 1907.
Hilda Erk. VII Grade, 4th Qua

Pressure of air.

I have a tumbler, a piece of paper, and a glass jar partly filled with water.

I fill the tumbler with water, place the slip of paper over its mouth, and invert it.

I see the water does not flow out.

The only way that I can account for this is that the air must be pressing upward, against the paper and holds it there. Water is heavier than air, but there is a whole column of air pressing on the small amount of water in the tumbler, and will not allow the water to flow out.

This experiment shows the upward pressure of the atmosphere.

PLATE XII. — An Average Paper selected from an Elementary Science Set (Grade VII "A"). (The "sketch" inserted by the pupil may be profitably compared with the elaborate decorations often seen on exhibited papers.)

IV

Question: How long is the street?

Data, { Part of an acre of land taken
width of Street.

To answer the question we must know the sq ft in land used for street and the width of street because the question is a form of the fundamental problem in Multiplication:-
Product ÷ Multiplier = Multiplicand.

Verbal Statement for problem: Length of street = Sq ft in street ÷ width.

Verbal Statement for Subordinate Problems. { Sq ft in Street = Sq ft in one acre × part used for Street.

Algebraic Statement: x ft = [(1/2 of 43,560 sq ft) ÷ (1 sq ft × 40)]

1/2 of 43,560 sq ft = 21,780 sq ft in Street

1 sq ft
40
40 sq ft) 21780 sq ft (544 1/2 ft long.
186
160
200
168
160
180

PLATE XIII. — An Arithmetic Paper from Grade VIII "B." (What would otherwise be good form is impaired by crowding on a small sheet of paper.)

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